Commerce Today

DECEMBER 8, 1975

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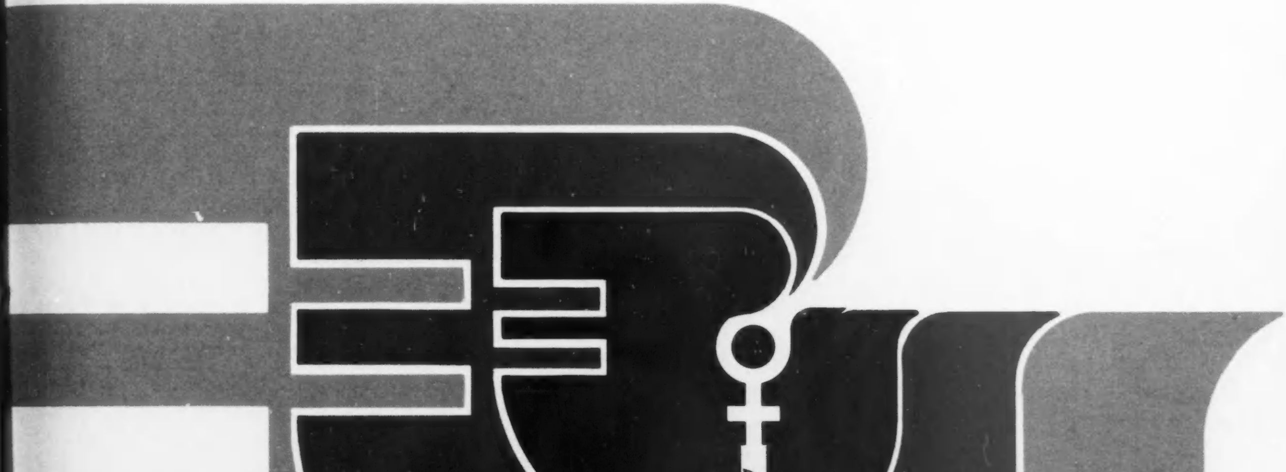
Reflections on International Women's Year 1975



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U.S. technology responds to challenges from all quarters. Auto glass producers, for example, have been asked to contribute to the fuel economy drive. So they have come up with thinner glass that helps reduce overall car weight for better gas mileage. PPG Industries, which is turning out thinner sidelights, rear windows and windshields for the Chevrolet Chevette, says that such reductions can save as much as 20 pounds per car. Auto makers are also designing larger glass areas into their new models, particularly the compacts and subcompacts, to increase visibility for better safety. The American Motors Pacer has about 37 percent of its exterior surface in glass, largest proportion of any domestic car.

Market forces are at work to ease the home canners' search for jar lids. A Commerce Department survey has found that expansion of existing lid manufacturing facilities and the entry of new producers into the market is bringing supply and demand back into balance. Home canning materials have been in tight supply for the past few years. In 1974 both jars and lids were hard to get because sharply accelerated demand outran supplies, which were held down by shortages of soda ash for jars and tinplate for lids. In the 1975 canning season, complete jar and lid units were plentiful, but replacement lids were difficult to obtain.

The tax collector's take went up 10 percent in a year, by the latest reckoning. Census Bureau's new compilation on U.S. tax revenues shows the 1973-74 total at $315.5 billion, up $29 billion from the previous fiscal year. Of overall U.S. tax revenue, more than 58 percent was collected by the Federal Government, 24 percent by the states, and 18 percent by local governments. Federal revenue came mainly from individual and corporate income taxes. State governments relied on a combination of general and selective sales and gross receipts taxes. Local units depended primarily on property taxes.

Your country, by the numbers. That's the story told in the annual "Statistical Abstract of the United States" published by the Census Bureau. A rundown of the tables appearing for the first time in the 1975 edition reflects subjects of current public interest: private health insurance coverage, alcoholism, nutritional intake, victims of crime, expenditures for environmental protection, motor vehicle pollutant emissions, impact of taxes on a four-person family, proportions of wealth held by the richest persons, U.S. and foreign increases in consumer prices, lease revenues and wells drilled in oil and natural gas, college enrollment by race. The Abstract, at $10.50 clothbound or $8 paperbound, is available from the Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402, or from Commerce District Offices.

The Abstract's handy insert "USA Statistics in Brief, 1975" is also sold separately. The nine-page vest pocket reference is available at 25 cents from the addresses given above. In easy-to-follow form it covers significant information about the U.S. social-economic scene, including population, vital statistics, education, employment and welfare, income and prices, government, agriculture, national defense and international commerce.

The movement to metric is taking a giant step. Fasteners with metric dimensions are finding their way into cars produced by the major Detroit manufacturers. About 4,000 fasteners—screws, bolts, clips, etc.—are used in an average auto. The automotive market accounts for annual fastener sales of about $500 million, or 20 percent of the industry's total sales. This rapid acceptance of metric fasteners—hard on the heels of international agreement on screw thread standards—is seen as foreshadowing widespread conversion to metric fasteners in the U.S.

A printing industry agreement in New York that accepts technological advances while protecting job security could be a breakthrough step. The accord was reached by the city's commercial printers and Typographical Union Local No. 6, and is similar to one reached last summer for the city's newspapers. It covers use of automated equipment, flexible work schedules, and mandatory retirement for over-68 workers. Labor and management consider the 10-year contract a pacesetter in commercial printing industry negotiations, and predict its provisions will spread to cities beyond New York.

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COVER: *Combining the dove of peace with the equality sign and the female symbol, this insignia of the United Nations International Women's Year has marked many and varied activities of women's groups throughout the world during 1975. As the special year comes to an end, progress can be seen for this nation's women. The story beginning on page 4 details some of the developments.*

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Published biweekly by the U.S. Department of Commerce, Washington, D.C. Annual subscription rate $29.80 ($7.45 additional for foreign mailing, $5.75 additional for domestic air mailing). Single copy $1.15. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce District Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.

Microfiche copy available at $1.45 per issue from National Technical Information Service, Springfield, Virginia, 22151. Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C. 20230.

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ECONOMIC HIGHLIGHTS

Consumer Prices Resume Moderating Trend

Economic Highlights is prepared by James L. Pate, Assistant Secretary of Commerce for Economic Affairs.

The profile of the economic recovery thus far appears to be typical with respect to real variables such as output, employment, and unemployment, but it is atypical with respect to prices. Unlike most other recovery periods, the recent upturns began with an unusually high rate of inflation. During the first 6 to 18 months of post-war recovery periods, consumer prices have either declined or have risen at a slower rate compared with the experience in the latter part of the recession. The exception was the surge after the outbreak of the Korean War, which coincided with recovery from the 1949 recession.

Change in Consumer Price Index

Recession Trough	last 6 months of recession	6 months after trough	next 12 months
October 1949	−2.2%	0	12.0%
May 1954	0.6	−1.3	0.4
April 1958	4.5	−0.2	1.5
February 1961	1.7	0.6	1.1
November 1970	4.9	3.9	3.2
April 1975	7.8	7.4	

Trough months of recessions, except April 1975, designated by National Bureau of Economic Research. Figures are at seasonally adjusted annual rates.

A central issue, therefore, is whether the rate of inflation will continue within the range of recent experience—and hopefully be reduced further—or whether prices will again resume rates of increase characteristic of 1973 and 1974.

Inflation can be gauged by a number of ways, none of which is perfect. Each of the general-purpose price indexes used in economic analysis has limitations. This article focuses on the Consumer Price Index (CPI) because it is one of the most closely monitored price indicators and affects many people.

The CPI is commonly used as a proxy for changes in the cost of living, and thus serves as an escalator for various types of income payments such as wages, rent, food stamps, and retirement benefits. According to the Bureau of Labor Statistics, a 1 percent increase in the unadjusted CPI can trigger about a $1 billion increase in income payments. In addition, the CPI is used to deflate certain economic series, such as weekly earnings, and many components of consumer expenditures. The timing of the data in the CPI, however, is not exactly matched to the timing of the income or expenditures data. Under current procedures, only 48 percent of the items in the CPI (in terms of their weight) are priced each month. Therefore, a single month's change should be used with caution.

Many individual components of the CPI are highly erratic on a monthly basis and, for analytical purposes, should be viewed on a seasonally adjusted basis. Temporary changes in prices of certain items can obscure underlying price trends. In practice, virtually every month's price statistics contain some aberrations, and any analyst can calculate various rates of inflation by excluding price changes thought to be nonrecurring.

As a general rule, economists prefer to evaluate the price situation by examining changes in the total CPI and in its major components over a period longer than one month. A three-month span is commonly used, with price movements adjusted for seasonality and converted to compound annual rates of change.

On this basis, the rate of inflation moderated substantially between autumn 1974 and spring 1975. All major components of the CPI contributed to the slowdown. Shortly afterward, concern over prospects for renewed double-digit inflation became widespread as the rise in the CPI accelerated to an annual rate of 9.5 percent during the three months ending in July. That was largely due to a temporary reacceleration in prices of food at home and to a slightly faster rise in prices of commodities less food. The latter resulted from some unusually large increases in gasoline, fuel oil and coal and used cars. Slower price rises occurred in food away from home and services. Over the long run, prices of food away from home, with a high service content, behave very much like services prices.

The most recent rise in the CPI (at an annual rate of 5.2 percent during the three months ending in October) indicates a resumption of moderating price tendencies. Rates of increase in the various components of the CPI, however, moved in different directions. Prices of food away from home and services rose at faster rates over the latest three-month interval, compared with the previous three months. The remainder of the index, food at home and commodities less food, rose at a slower rate.

Looking ahead, it is likely that the overall rate of inflation will be influenced in large part by prices of energy and food at home, which have been volatile in recent years. Clearly, further price increases in energy will occur, but their timing and magnitude are highly conjectural.

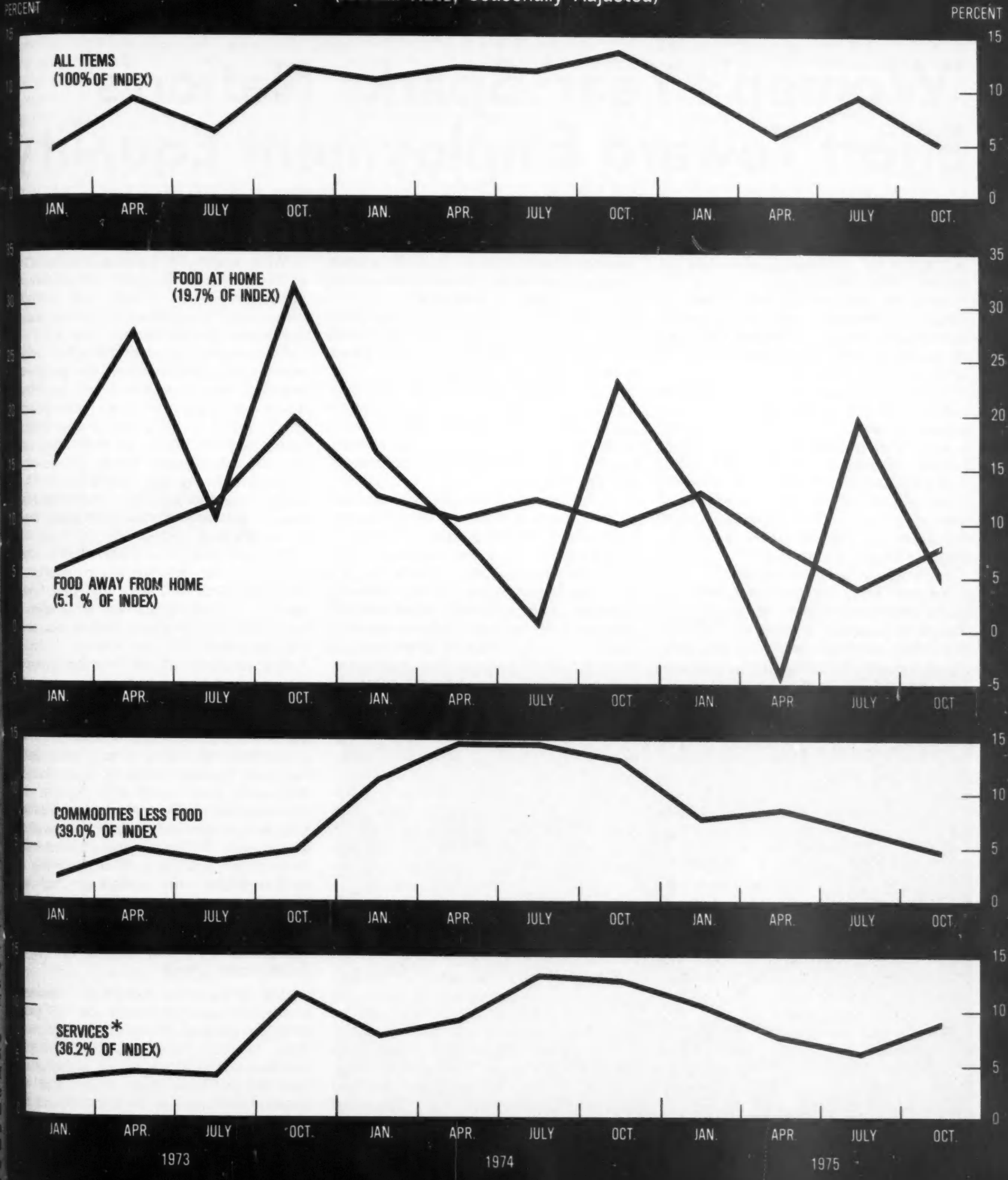
The agricultural situation and prospects for retail food prices are encouraging. A record U.S. grain harvest is assured and the number of livestock on feed is being increased. Since early October, when the last survey of retail food prices was taken, there has been a sharp break in farm prices. This can be expected to contribute to moderation in retail food prices in the months ahead. According to the Agriculture Department, retail food prices are projected to rise at an annual rate of 4-5 percent during the first half of 1976, following an estimated 9 percent gain in 1975.

If historical patterns prevail, productivity will continue to register above-average gains. This is another reason for expecting moderation in prices since productivity gains are an important offset to increases in labor compensation, and thus help to moderate increases in unit costs of production.

On balance, it would be reasonable to expect the CPI to advance at about a 5 percent rate for the remaining months of 1975 and throughout 1976. If so, the year-to-year increase in the CPI would be about 6 percent. Six-percent inflation is still unacceptably high, though it would represent continued improvement from the 9 percent increase this year and the 11 percent increase in 1974.

CHANGE IN CONSUMER PRICES OVER 3-MONTH INTERVALS

(Annual Rate, Seasonally Adjusted)



* Not Seasonally Adjusted

Source: Bureau of Labor Statistics

Commerce Today
December 8, 1975
Vol. VI, No. 5

'Women's Year' Sparks Nation's Effort Toward Employment Equality

As International Women's Year draws to a close, examples are appearing everywhere of a new and strong interest in equality of working opportunities for women. They include:

- An economic research study commissioned by Commerce's Economic Development Administration to examine changes in earnings and labor participation of women;
- Census Bureau figures showing the major impact of spending controlled by women in the United States;
- An International Women's Year Conference attended by 50,000 in Cleveland.

What exactly is woman's present economic place in the business world? Is it improving, and, if so, at what speed? What are the factors inhibiting women from achieving job equality?

Some of the answers may be found in a research study being funded by Commerce's Economic Development Administration to examine changes in earnings and labor participation of women over the decade of the 1960s. The grant was awarded to Florida State University.

In order to analyze earning differences, the impact of factors which affect an individual's earning potential had to be estimated. The Florida State team studied 32 factors, grouped into four major categories:

- Human capital—All the capabilities an individual brings to the labor market;
- Skill utilization—The way these capabilities are used;
- Market forces—The interaction between the demand and supply of certain skills which may affect their value;
- Employer discrimination.

Since it was difficult to measure all of the factors, substitutes were sometimes used, such as years of schooling or experience for human capital.

One of the major interim findings of the study was that most of the gains women have experienced in the past decade resulted from their achieving higher educational and skill levels and not from more equitable compensation, or lessening of employment discrimination.

Other comparisons turned up by the research:

- The wage differential between men and women doing identical tasks is still large and inequitable in most occupations.
- While this is partly due to dissimilar earning characteristics, even if women possessed the same characteristics, their earnings would still trail men's.
- Although male/female educational levels are similar, the return in dollars on each year of additional education works in favor of the male.
- Earnings of nonwhite females were between 75 and 85 percent of white female earnings in 1970, but if they possessed similar earning characteristics, their earnings would be 99 percent of white earnings.

The study also addressed the question of how women could be given the incentive to use their productive resources in the labor market. Factors seen as discouraging this include rigid hours, inequitable benefits from social insurance, variables in income tax deductions for child care, and sporadic economic growth, which discourages women from entering the labor force because they know they will be the first cut from the payrolls when the growth cycle ends.

One other major factor inhibits married women in pursuing careers—the relocation problem when a husband's job requires him to move. Studies show that such relocating causes considerable interruption in the employment of wives. In every age category, the proportion of wives working in both 1965 and 1970 was much lower where relocation had occurred. On the other hand, these women suffer from a lack of mobility in their own jobs because the husbands' jobs tend to keep them anchored to the location of his employment.

The direct impact in terms of the percent of women who contribute goods and services by actually participating in the work force has become enormous, according to the Director of Commerce's Bureau of the Census, Vincent P. Barabba. And he sees the total spending influenced by women in America—funds controlled by housewives, self-supporting single women, working wives and funds inherited by widows—as almost defying the imagination.

In a speech prepared for delivery at a conference on The Role of Women in Business at Lake Charles, La., Barabba discussed the following points:

What women in America decide to do, or not to do, in the years just ahead can create an impact which can outweigh even such far-reaching decisions as oil embargoes by the OPEC nations.

For instance, consider the effect which women in just one age category—the twenties—can have on the economy. These are the primary child-bearing years. What if a sizable proportion of this group decided not to marry, and instead entered the work force on a permanent basis? Or what if many who do marry decided to have more children than is presently the case, or have fewer children?

Planners and economists already have examined the effects which more, or fewer, children will have on education—on the number of teachers and schools, on community services, and on business and industry.

The younger half of this age group—women from 20 to 24—now constitute a bellwether population group which may well concern the economists as deeply as the leading economic indicators.

The flag which used to say "male only" has been lowered for most jobs and occupations—and significantly so at the executive level which characterizes leadership in business and industry, as well as government. If more women concentrate their talent and gear their training to achieve higher level positions, they will find that the opportunities are greater than ever before—although there are still obstacles.

More women work

One of the more remarkable increases which has emerged in the last 25 years is the proportion of women in the work force. In 1950, about 18,412,000 women or one-third of all women of working age were in the labor force. Last year the number had risen to 35,892,000 and the proportion had risen to 46 percent. These women acounted for 39 percent of the total labor force.

There have also been interesting changes in the last 25 years in the participation rates of women in the different age groups.

All through the 1950s and into the early 1960s the proportion of older women in the work force rose dramatically, partly because many women who had worked during World War II were eager to seek employment again once their children had entered or completed school. During this period, the percent of women from 45 to 54 who were working rose from 38 percent in 1950 to 51 percent in 1964, while the rate for women 55 to 64 rose from 27 percent to 40 percent. But significantly, in the last ten years, participation of the 45-to-54-year-old group has increased only 3 percentage points and the 55-to-64-year-old group has increased only half a percentage point.

Then in the mid-1960s when the percent of older working women began to stabilize, there was an upsurge in participation by younger women. Those in the 20-to-24-year-old group—the bellwether group mentioned above—increased their participation rate from 50 percent in 1964 to 63 percent in 1974. During this same ten-year period, the next younger group, those from 25-to-34 years old, increased their participation from 37 to 52 percent, another substantial increase.

The remaining age group is women from 35 to 44. This group also has been experiencing a steady increase in participation—from 39 percent in 1950 to 55 percent last year.

Not surprisingly, women who have never married have much higher rates of labor force activity than those who have married. But still, the rate at which married women have joined the labor force has risen sharply. As of this year, 44 percent of married women are in the labor force, compared with 57 percent of single women and 41 percent of those who are widowed, separated or divorced.

Married women with pre-school children have a significantly lower participation rate in the labor force than other married women, 37 percent, but even they have been entering the job market more frequently than before. This phenomenon is reflected in the growing number of children enrolled in nursery school. Even though there were fewer children of nursery school age in 1974 than in 1970, nursery school enrollment expanded by nearly 50 percent to a total of 1.6 million. This growing number of working mothers with pre-school children is significant in terms of cumulative work experience and the employment continuity of working wives.

A major factor in women's increased participation in the work force has been education, and here is a positive influence contributing to increases in the percentage of working women.

There have been marked advances in the past 25 years in the proportion of women who are high school graduates. The youngest five-year age group on which educational statistics are normally published is that which is 25 through 29 years old. This year, a total of 82 percent of these women are high school graduates. In 1960, the figure was only 62 percent and back in 1950 it was 55 percent.

A good look at higher education among women is important, not only because of the growing percentage of college-trained women but also because of the new perspective which higher education brings to women's future participation in the work force.

One key to the years just ahead lies in the college expectations of high school seniors. Last year, about 72 percent of female high school seniors indicated that they planned to attend college or might attend. Perhaps some of them were overly optimistic, but their intent speaks well for a greater contribution in the future to the more meaningful jobs which that higher education would bring.

Women earning more degrees

Women have come a long way in catching up to men in education. Of persons in the work force, only three-fourths as many women have gone to college, but more women than men in the work force have completed high school. From the standpoint of degrees actually earned, the latest figures show that women workers earned 42 percent of all bachelor's degrees, 41 percent of all master's degrees, but only 16 percent of the doctorates. However, the proportion of women doing advanced graduate work is on the rise.

All in all, by last year the distribution of the female work force in the United States by educational attainment was approaching that of the male. With Women's Liberation, they were also finding more meaningful employment than earlier college graduates who had been limited to secretarial jobs or other positions traditionally filled by women.

Women account for 49 percent of the white-collar workers but only 17 percent of those in blue-collar jobs. Even though there are approximately equal proportions of women and men in the professional and technical fields, women are heavily concentrated in the lower-paying jobs, while men continue to dominate the higher-paying professions such as law, medicine and engineering.

Women hold the majority of jobs in the service industries—about 56 percent. Nearly two-thirds of the workers in education are women, as are three-fourths of those in the medical and health fields and in personal services.

Women also are heavily represented in government, retail trade and manufacturing, which, together with the service industries, accounted for nearly 90 percent of female employment in 1973. Beyond these fields, however, women workers have been entering other industrial sectors in significant numbers. For example, women now hold more than half of the jobs in finance and more than one-fifth of the jobs in transportation.

These apparent gains are tempered by the continued poor representation of women in senior positions within each industry. Still, there has been some pene-

OBSERVING WOMEN'S YEAR—*First Lady Betty Ford (center) addressed the Greater Cleveland Congress on International Women's Year. At left is Congress chairperson Gwill York. At right, Jill Ruckelshaus, presiding officer of the National Commission on the Observance of International Women's Year and keynote speaker.*

tration into industrial sectors which had been traditionally closed to women. And there is an increase in the proportion of women seeking the necessary training required to undertake new careers.

Despite the progress by women in these various categories of work, there remains one sensitive area where women workers are far behind males—earnings. Studies show an overall discrepancy of about 40 percent between male and female earnings.

Some researchers attribute nearly all of this discrepancy to such factors as part-time employment and differences in job responsibilities, education and length of service. But more studies indicate that—even after accounting for these factors—there still are large differences in earnings, even for the same job assignment and similar quality of performance.

All of these statistics probably will change for the better in the years just ahead for America's working women. And one major reason is the change in lifestyle among married women. Women today are having fewer children, and the trend toward smaller families is accentuated as women find paid employment more appealing.

In the past, childbearing brought with it at least a temporary withdrawal from the work force. This had a crucial impact on a woman's career development because the years of withdrawal generally took place during the years when job advancement would have been the most rapid, and when seniority would have been established.

In the past decade, however, the annual fertility rates for women have declined significantly. For example, if women were to continue to bear children at the rates which prevailed in 1965, they would have an average of 2.9 children each. If, however, women were to continue the fertility rates of 1974, the average number of children would decline to 1.9 per woman.

Birth expectations declining

Another key indicator that will affect the work force is birth expectations. Again in 1965, women aged 18-to-24 expected to have an average of 3.1 children during their lifetimes. This had dropped to only 2.2 by last year—a very major decline.

Yet another factor in today's society which has a marked effect on women in the work force is the increasing acceptance of childless marriages.

The female-headed family has become an increasingly frequent phenomenon in recent years, so their problems have taken on greater significance in society. As of last year, nearly half of the women who headed families were divorced or separated, and the rates of divorce and separation are rising. Among the other women who head families, 37 percent are widowed and 13 percent are unmarried. Last year, more than one-third of these mothers 25-to-44 years old had three or more children.

High child-care costs and low earning potential reduce the attraction of paid employment for these women, and in many cases make it uneconomical. The problem is more serious for female heads of poor families, and 61 percent of them do not even seek outside employment.

The Census Bureau publishes reports on a regular basis which contain statistical information on women in the economy as well as other information on women in America. Two Census Bureau projects presently under way specifically relate to women.

One concerns the status of women in our society, and was scheduled for distribution by the end of the year.

The other project is the first nationwide headcount of women in business. This survey is being conducted for Commerce's Office of Minority Business Enterprise, and is gathering information on partnerships, sole proprietorships and corporations. The report will break the various categories down by geographic area, industry, employment, receipts and legal form of organization.

Studies in the past have shown that female entrepreneurs are concentrated heavily in the services, such as beauty parlors, and in retailing and wholesaling. The 1970 census told the Census Bureau that there were 1,060,000 self-employed women. But the new survey is designed to show for the first time how many women actually own businesses.

This report also should be available by the end of the year.

Cleveland observes IWY

An estimated 50,000 people attended a three-day congress held recently at the Cleveland Convention Center as part of that city's observance of International Women's Year. Keynote speaker was Jill Ruckelshaus, presiding officer of the National Commission on the Observance of International Women's Year. Guest speakers included First Lady Betty Ford, Madame Pandit, former President of the United Nations General Assembly, and author Letty Cottin Pogrebin.

Programs scheduled throughout the three days included Women and the Law, Women in the Military, Women as Peacemakers, Volunteerism, The Female Consumer, Women in Politics, and Jobs for Low Income Women, among many others. Thirty-two special workshop sessions were scheduled for high school students.

In her welcoming address, Mrs. Ford noted that, "While many new oportunities are open to women, too many are available only to the lucky few . . . This year is not the time to cheer the visible few, but to work for the invisible many, whose lives are still restricted by custom and code."

She expressed her hope that the Equal Rights Amendment would be ratified during 1976, but cautioned that it would not solve all of women's problems. "The long road to equality rests on achievements of women and men in altering how women are treated in every area of everyday life . . . Freedom for women to be what they want to be will help complete the circle of freedom America has been striving for during 200 years. As the barriers against freedom for Americans because of race or religion have fallen—the freedom of all has expanded. The search for human freedom can never be complete without freedom for women."

A seminar on Women in Government, moderated by Zelda W. Milner of Commerce's Cleveland District Office, featured speakers representing federal, state, city and county government. They were: Constance Newman, Commissioner and Vice Chairman of the Consumer Product Safety Commission, Washington, D.C.; Rita Vincent, Director of Executive Staff, Navy Finance Center, Cleveland; Helen Evans, Director, Department of Industrial Relations, State of Ohio; Ruth R. Miller, Director, Department of Health and Welfare, City of Cleveland; and Catherine C. Dickman, Public Information Officer for the Cuyahoga County Commissioner.

Speaking on *Women in Government: Challenges and Opportunities in a Bureaucracy*, Commissioner Newman pointed out that she does not consider the word bureaucracy a disparaging term.

"The stability and the accumulated expertise that it represents are essential to the functioning of our government," she said.

She gave advice to women seeking careers in government that could apply to other forms of employment as well: "In order to ensure that the system works for them, women must undertake to understand how that system works. They must understand the personnel rules; they must know what training is required for what types of positions; they must know what training opportunities are available; they must avail themselves of these opportunities.

"Women must learn to distinguish between jobs with real responsibility and jobs with a title," according to Newman.

As to what women can contribute in government service, Newman observed: "Because government touches on almost every aspect of our lives, it is of critical importance that it operate with wisdom and with the informed consent of the governed.

"I believe that women can bring with them to public policy a perspective that differs from that of men. What is important about this 'difference' . . . is that it be factored into public policy."

U.S. Provides Duty-Free Treatment For Products Of Developing Nations

The United States has now joined the other major industrialized nations in a program of assistance to the developing countries that aims to decrease their need for outside financial help by building up their export opportunities.

On Jan. 1, imports of a wide range of products from 98 developing countries and 39 dependent territories will enter the U.S. free of duty. This special status results from the implementation by President Ford of the U.S. Generalized System of Preferences (GSP), in accordance with the Trade Act of 1974. The GSP is being implemented following extensive public hearings, during which all interested parties had an opportunity to express their views, and consultations by the Administration with Congress.

Executive Order 11888, issued Nov. 24, contains the list of products eligible for duty-free treatment. On the basis of 1974 trade data, imports of the 2,724 eligible items accounted for $2.6 billion in trade from eligible countries or approximately 2.6 percent of total U.S. imports and 8 percent of total dutiable imports from eligible countries.

In addition, the Executive Order makes several major changes in the initial list of eligible beneficiaries (see *Commerce Today*, April 14). Cyprus, Hong Kong, Israel, Romania, Somalia and Turkey are added as eligible beneficiaries and Cambodia and South Vietnam are deleted. Also designated as eligible dependent territories are Christmas Island and the Cocos (Keeling) Islands. Six territories originally designated as eligible have been re-designated as eligible countries, reflecting attainment of independence: Angola, Cape Verde, Mozambique, Papua New Guinea, Sao Tome and Principe, and Surinam.

Major countries which are currently ineligible for GSP, but which could become eligible by complying with the requirements of the Trade Act are members of OPEC (Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela), and also Greece, Portugal and Spain.

Purpose of GSP. Title V of the Trade Act of 1975 authorizes the President to grant generalized tariff preferences to imports from developing nations for a period of ten years (see *Commerce Today*, Jan. 6 and April 14). Implementation of GSP permits the United States to fulfill a pledge made in the fall of 1970, along with 17 other developed countries, to seek legislative authority to implement schemes of voluntary, general and non-reciprocal tariff preferences for imports of certain products from developing countries. The United States is the last preference donor country to fully implement a scheme in accordance with the pledge.

GSP is one element in a coordinated and concerted effort by the world's industralized nations to bolster the competitive position of developing country exports thus increasing export earnings needed by these countries to finance domestic economic development. GSP will serve, therefore, to decrease the need of developing countries for external financial assistance.

For More Information

For details on product and country eligibility under the Generalized System of Preferences, consult:

▶ The Nov. 23 issue of the *Federal Register*, Part 3. This publication is available at any public library.

▶ The nearest District Office of the U.S. Department of Commerce (list is on inside back cover of this magazine).

▶ The Office of the Special Representative for Trade Negotiations, 1800 G St., NW., Washington, D.C. 20506.

▶ The revised Tariff Schedules (available later this year), on sale from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

For details on U.S. Customs regulations and procedures, consult the nearest District Director, U.S. Customs Service.

The U.S. scheme is a major element in the new dialogue between developed and developing countries pursued successfully by the U.S. at the Seventh Special Session of the United Nations (see *Commerce Today*, Sept. 15). In addition, the U.S. scheme is designed to bring developing countries more fully into the International trading system by encouraging diversification of production. This would further stimulate the economic development of beneficiary countries, thus contributing to the expansion of market opportunities for all nations, including the United States.

Beneficiary Countries. When designating a beneficiary country, the President must consider a number of factors including the level of economic development of the country, whether other donor countries are extending preferences to the country, and whether the country has assured the United States of equitable and reasonable access to markets and access to supplies of commodity resources.

The President is prohibited from designating as a beneficiary: 1) Communist countries, except Yugoslavia and Romania; 2) OPEC countries or other countries withholding supplies of vital commodities from international trade or raising the price of such commodities to an unreasonable level, and thereby causing serious disruption of the world economy; 3) countries which grant reverse preferences to other developed countries with significant adverse effects on U.S. commerce unless the preferences or their adverse effects are to be eliminated by Jan. 1; 4) countries which have nationalized property of U.S. citizens or businesses without prompt, adequate, and effective compensation, or negotiation or arbitration; 5) countries which do not take adequate steps to prevent illegal drugs produced in, processed in, or transported from their borders from entering the United States; and 6) countries which do not act in good faith in recognizing or enforcing arbitral awards in favor of U.S. citizens or businesses.

GSP Product Coverage

Selected eligible products under the new U.S. Generalized System of Preferences include:

Corned beef, sugar, most wood and paper products, certain organic chemical compounds, soap and synthetic detergents, certain mica items, safety razors and blades, calculators, radios (except for use in autos), motorcycles, most sports equipment and games, cameras, bentwood furniture, black-and-white TV tubes.

Selected ineligible products include:

Cotton textiles, manmade fiber and woolen textiles, watches and clocks, most iron and steel products, leather and rubber footwear, certain electronic components, certain consumer electronic items, most glass and certain glassware items, petroleum and petroleum products, certain chemicals and related products, ball bearings, certain earthenware and china items, bicycles and tires, firearms, plywood, certain fruits and vegetables.

The President may waive for any country the exclusions based on nationalizations, drug traffic, and arbitral awards for reasons of U.S. national economic interest. Moreover, members of OPEC or other cartel-type arrangements may become eligible for GSP if they conclude a trade agreement assuring the United States fair and equitable access to supplies of basic commodities. All designated beneficiaries will be kept under review to assure that they continue to meet these statutory requirements.

Product Coverage. The products which will receive duty-free treatment under the GSP include a wide range of manufactured and semi-manfactured products, and selected agricultural, fishery and primary industrial products (see box for selected list of eligible products). The designation of eligible products has taken into account the possible negative impact on certain domestic industries which the granting of tariff preferences might have. For this reason, several groups of articles are specifically excluded by law. These include: 1) textile and apparel articles subject to international agreements and certain textile products which are directly competitive with such articles; 2) steel articles which were subject to the Voluntary Restraint Agreement; 3) footwear; 4) watches; 5) articles subject to import relief action (certain ceramic dinnerware and certain ball bearings); and 6) articles subject to national security action (certain petroleum products). Also excluded by law are import-sensitive glass and electronic items and other products which the President determines to be import-sensitive (see box for selected list of ineligible products).

Advisory Procedures. In order to assure adequate information regarding the import sensitivity of products being considered for GSP, the Trade Act required the completion of several advisory procedures.

In compliance with these procedural requirements, President Ford on March 24 issued a list of approximately 3,100 products to be considered for GSP treatment. Imports of these products from eligible developing countries were valued at $9.8 billion in 1974. Competitive-need limitations (described below) reduced this figure by $6.3 billion so that $3.5 billion in imports from eligible developing countries remained potentially eligible for GSP benefits.

The International Trade Commission held public hearings regarding the potential economic impact of preferential imports on U.S. producers and consumers and submitted a summary of the testimony received and its advice to the President. Likewise, the interagency Trade Policy Staff Committee held public hearings regarding the impact of the GSP on the U.S. economy and submitted a report of these hearings to the President. In addition the executive agencies represented on the committee presented their separate advice.

In making his determination of the eligible products the President took into account all the advice he received. As a result, some 350 additional items, accounting for $1 billion in trade from eligible beneficiaries, were found to be import-sensitive and thus ineligible for GSP.

Potential Value. Although imports of eligible articles only accounted for 2.6 percent of total U.S. imports in 1974, the GSP now being implemented is expected to offer broad export opportunities to beneficiary countries to the extent they make use of it as an incentive to diversify their industrial production. Total trade in the article classifications eligible for GSP currently amounts to $25 billion a year or a fourth of all U.S. imports. Preferences will give developing countries a margin over developed countries in competing for this $25 billion worth of imports, plus any growth in these import categories, up to competitive-need ceilings.

Safeguard Measures. The "competitive-need" provision of the Trade Act limits the amount of U.S. imports eligible for GSP treatment. Under this provision, the President will suspend GSP eligibility on imports of a particular article from a particular country whenever that beneficiary country has supplied 50 percent by value or more than $25 million of the particular item during any calendar year. In addition, a domestic industry may seek aid under section 201 of the Trade Act, the so-called "escape clause" provision, which permits general import relief upon a determination by the International Trade Commission of injury to the domestic industry. Also, administrative procedures for additions to or deletions from the product list will be issued shortly by the Office of the Special Representative for Trade Negotiations (and will be reported in a future issue).

Effective Date. Designated products which are both imported and either entered for consumption or withdrawn from warehouse for consumption on or after Jan. 1, will be considered for GSP eligibility.

Request for GSP. A written claim requesting duty-free entry under the GSP must be filed at the time of entry.

Country of Origin. To be eligible for GSP duty-free status, eligible products must be imported directly from eligible beneficiaries. As evidence of the country of origin, the importer or consignee of a shipment of eligible merchandise will generally be required to file with the Customs district director a Certificate of Origin, Form A. The Form A shall be furnished and signed by the exporter of the merchandise in the country from which it is directly imported and certified by the appropriate governmental body in that country.

Value-added Criteria. Eligible merchandise may qualify for GSP only if the sum of the cost or value of the materials produced in the beneficiary developing country plus the direct costs of processing operations performed there are at least 35 percent of the final appraised value of the merchandise.

Proposed Regulations. The U.S. Customs Service has issued proposed regulations for GSP which set forth in detail all requirements for GSP eligibility. These proposed regulations, published in the *Federal Register* of Oct. 28, for public comment, will be issued in final form before Jan. 1. For further information regarding the procedures for obtaining duty-free entry under the GSP, importers and other interested persons should contact the nearest District Director, U.S. Customs Service.

Community-Wide Energy Effort Adds Special Focus On Children

In the Binghamton area, where 29 industries are shut off from natural gas supply and students face the prospects of chilly classrooms, New York's Southern Tier Energy Conservation Council is proving just how much one community can do about a national problem of such magnitude as the energy shortage. And, in an unusual move, the Binghamton program has singled out children for special attention as energy savers.

"We started with the assumption that an individual and a single community can make a difference," says Harold Kammerer, executive vice president of the Broome County Chamber of Commerce, the parent organization of the Energy Council. The result has been:

- An energy conservation contest which stimulated savings as high as 51 percent in a private residence and 42 percent in an industry.
- An energy conservation museum where Binghamton area school children get an early awareness that everything in life has energy and uses energy, and are shown how to make better use of the energy that will be left for their generation.
- A survey of attitudes to determine the degree of awareness of energy problems and reasons for apathy that was found in some segments of the community.
- A bi-monthly television show featuring 30 minutes of energy news.
- Five-minute energy news announcements on the Chamber's radio program.
- An E Con Index, a catalog of energy conservation experiences of private and industrial residents, is being compiled for possible later publication. This index will show how various energy-saving techniques and equipment work in the Binghamton area, which sometimes experiences severe winters.
- Bi-monthly technical education programs where industrialists view exhibits of energy conservation equipment and hear discussions of new methods of saving energy without curtailing production.

PIONEER—*A major energy saver of the World War II era, the Link simulators conserved enormous quantities of fuel that would otherwise have been spent on actual airborne training. The inventor was a Binghamton native, and it will be housed in the city's energy museum.*

The Broome County Chamber of Commerce, is an Associate Office of Commerce's New York District Office. Bill Spitler, District Office trade specialist who works with the Broome County Chamber, notes that in a single year groups ranging from the League of Women Voters to the local council of the AFL-CIO have been mobilized for active participation in the energy conservation programs. The City Council has commended the "E for Energy" awards and the City of Binghamton changed its street lighting to use more energy-efficient bulbs.

Competition

The most popular program, according to Spitler, is the energy conservation contest, which accurately charts results of each conservation effort. Industrial and private participants in the contest sign a form allowing the utility company to reveal the amount of energy consumed last year and the Energy Council compares that figure with current consumption.

The contest results have produced unusual stories. A housewife, Jean Bixler, saved 51 percent by installing some hallway doors and letting the sun heat the house. She saved 1,000 gallons of heating oil and 1,200 kilowatt hours in a year.

Kroehler Manufacturing Corp. cut its energy consumption by 42.2 percent, the

LEARNING BY DOING—*The tiny models of home appliances in front of the children at left are weighted to exactly balance the amount of coal it would take to operate a real-life version of the appliance. At right, youngsters learn how to operate ageiger counter.*

largest industrial reduction to date.

Endicott Forge, an energy intensive industry, saved 13.7 percent by reclaiming heat with a heat wheel and using the purified heat for its industrial operations.

An award was given to the Binghamton Housing Authority for a modest saving of 8 percent, because any reduction in consumption in housing for the elderly was regarded as worthy of recognition.

Energy contest participants exchange "how to do it" stories at a monthly "E for Energy" awards breakfast.

Although national interest is focused on educating adults to save energy today, the Binghamton area places strong emphasis on youth.

The Chamber charged the Energy Council with the responsibility of educating the entire community to be better energy users," says Dave Treichler, the Broome County Chamber's coordinator for energy programs, "but a substantial amount of attention is being given to youth programs because of the potential for the future."

The Energy Council kicked off its activities last year with a poster contest in which some 8,000 school children in 12 systems were participants. Art teachers narrowed the field to 154 and the final winners and their parents were honored at a special luncheon.

The energy museum is also directed toward children. It probably will be the greatest long-term accomplishment of the Southern Tier Energy Conservation Council. "The museum operates on the same theory the airlines used a few years ago when they began letting students fly for half fare," says Bill Naiva, a New York State Electric & Gas Co. official who was instrumental in forming the council. "That theory was to fly students for half fare and when they grow up we will have a generation of airline riders. Hopefully, our efforts in the energy conservation area will be as successful as the airlines. At any rate we feel strongly that children offer the most hope for better use of energy."

Currently housed in a former New York State Electric & Gas home, the energy museum is expected to find a permanent home in a new wing of the Roberson Memorial Museum in Binghamton. It will house a complete science and industry exhibition, emphasizing life support for mankind in a hostile environment. In addition to displays on sources of energy, understanding what it is and where it comes from, the new wing will give special attention to wildlife, ecology and conservation of natural resources.

Valued Role

"This Binghamton experience is an example of the Associate Office program at work," according to John P. Gleason Jr., Director of Commerce's Office of Field Operations. "We have 840 Associate Offices throughout the country, working with our 43 district offices to actively promote Commerce's programs at the local community level. They provide valuable manpower and resources to assist in export promotion, productivity enhancement, as well as sponsoring seminars on a wide variety of topics and referring business executives to our trade specialists for counseling. And, as in the case of Binghamton, they promote locally the very important program of energy conservation."

Local industries, such as Singer Simulation, which manufactures the Link simulation devices, a major energy saver, are also expected to have displays in this section of the museum. The Link simulators will add a touch of history to the science and industry wing since the man who invented the simulators which save enormous amounts of energy in training and testing, is a Binghamton native.

The present energy museum takes children from fossil fuels through principles of nuclear and solar energy. It allows them to feel coal dust and load coal onto a scale to illustrate how much energy is actually used to operate a clothes dryer, a refrigerator, a room air conditioner, or a single light bulb. Other students test their strength by pushing or pulling down a 20-pound weight to get the feel of exactly how much energy is needed to produce one BTU.

Beat up pans and perfectly shaped pans are heated on a stove to illustrate the energy wasted in the pans that have dents.

"We think the results produced by our Associate Office in Binghamton and its Energy Council are remarkable," concludes Abner Fein, Deputy Director of the New York District Office. "It certainly illustrates that the solution to our energy problem has to begin on an individual and community level. We feel other communities throughout the nation can profit from Binghamton's example."

Energy Management Digest

IMPACT ON AVIATION. . .Air traffic is 17 times heavier than it was 15 years ago and air transportation consumes 16 times more fuel than in 1950, reports a comprehensive new study of the Economic Impact of Energy Shortages on Commercial Air Transportation and Aviation Manufacture. The two-volume study–prepared by Stanford Research Institute–explores a variety of policy options but makes no specific recommendations. It examines energy-related expenses since the 1973 oil embargo and analyzes the ability of airlines to conserve fuel. It also examines the relative fuel efficiency of various types of aircraft. Copies can be ordered from the National Technical Information Service, Port Royal Rd., Springfield, Va. 22151.

FEDERAL ASSISTANCE. . .Federal Energy Administrator Frank Zarb has written to the governors of 21 states describing federal assistance plans which might help ease the impact of natural gas shortages this winter. "While some of these programs are doubtless well known," Zarb wrote, "others may not be." He enclosed a brief description of available federal programs and the locations of the regional offices administering them, noting that in some communities effective conservation measures could "make the difference between open or closed factories in the coming winter." He also enclosed publications describing specific actions businessmen can take to conserve natural gas. They can be ordered from FEA's Office of Communications and Public Affairs, Room 3136, Washington, D.C. 20461.

INDUSTRY LEADERS SPEAK. . .A sampling of the opinions of industry executives on the mission, structure, and location for a Solar Energy Research Institute has been released by the Energy Research and Development Administration. The opinions were compiled for ERDA by the MITRE Corp. in a report entitled Industry Opinions on the formation of a Solar Energy Research Institute (SERI). The MITRE report contains opinions of executives from 16 industrial firms who attended a conference at MITRE. Both the MITRE report and a lengthier earlier study by the National Academies of Sciences and Engineering (NAS-NAE), Establishment of a Solar Energy Research Institute, may be obtained from the Technical Information Center, ERDA, P.O. Box 62, Oak Ridge, Tennessee 37830, or NTIS, Port Royal Rd., Springfield, Va. 22151.

NOTICE OF SHIPMENTS. . .The Nuclear Regulatory Commission is amending its regulations to require advance notice of some shipments of special nuclear materials. The amendments require that the appropriate NRC Regional Office be notified at least seven days in advance of a shipment, and also be notified upon arrival of the shipment. The requirements apply to shipments of 5,000 grams or more of uranium-235 (contained in uranium enriched to 20 percent or more), 2000 grams or more of uranium-233 or plutonium, or a combination of these materials equaling 5000 grams or more. They do not apply to used fuel from reactors.

COAL COMPLICATIONS. . .Legislation to protect clean air now being considered in the House and Senate could seriously complicate construction of new coal-fired power plants, according to a jointly prepared Federal Energy Administration and Environmental Protection Agency report. The 44-page report was prepared to evaluate an amendment to the Clean Air Act being considered by the Senate Subcommittee on Air and Water Pollution and the House Subcommittee on Public Health and Environment. It concludes that Congressional proposals to prevent "significant deterioration of air quality" in areas already cleaner than required by federal standards could affect about three-quarters of the capacity of new coal-fired power plants.

WRINGING OUT THE OIL...The U.S. Energy Research and Development Administration and Phillips Petroleum Company have announced a cost-sharing $9.8 million project to demonstrate tertiary (third stage) oil recovery by a chemical water flooding technique. During a 51-month field demonstration, Phillips will initiate the micellar-polymer flooding of 90 acres. The firm estimates the test area could produce as much as 600,000 additional barrels of oil over a five-year period. If the project is a technical and economic success, the process could be applied to a neighboring area containing more than 50 million barrels.

DOMESTIC BUSINESS REPORT

New Consumer Affairs Unit To Tell Commerce Officials What The U.S. Public Wants

A new Consumer Affairs Division has been established in the Commerce Department to help improve consumer representation in government. Located in the Ombudsman's Office, the new division will serve as a focal point for Commerce-related consumer inquiries and requests for assistance. It will also seek consumer views on current issues affecting them.

The division's findings will be used by Commerce in its advisory and administrative functions and will also be presented to the business community in a series of business-consumer forums. These will review consumer expectations and business options for meeting these expectations, as well as federal, state and local government involvement in business-consumer relations.

Advisory council established

In addition, Commerce will establish a Consumer Affairs Council, an intradepartmental group that will consider consumer-related issues and prepare recommendations for policy-making officials.

The Council will be comprised of representatives from each Commerce unit having consumer-related responsibilities and programs. It will be chaired by Dr. Betsy Ancker-Johnson, Assistant Secretary for Science and Technology, and Travis E. Reed, Assistant Secretary for Domestic and International Business.

According to Secretary of Commerce Rogers C. B. Morton, "The Commerce Department has a wide variety of functions ranging from administration of export controls to advising on trade negotiations. Many of these functions are closely related to the welfare of consumers who should, therefore, have a way to make their opinions about them known to the Department."

The new Consumer Affairs Division is part of the Bureau of Domestic Commerce in Commerce's Domestic and International Business Administration. This is one of four areas of Commerce involved in consumer-related issues. The other three are the National Fire Prevention and Control Administration, National Bureau of Standards, and National Marine Fisheries Service.

Activities of primary interest with respect to consumer representation plans are the development of legislative recommendations, participation in trade negotiations, administration of short supply export controls, and negotiation of international textile and apparel agreements.

In drawing up its legislative program, Commerce has already established procedures to ensure that interested agencies, persons or groups are asked for their views during the formulation of Departmental positions.

With regard to trade negotiations, there are statutory requirements for consumer representation on an advisory committee and provision for consumer participation in public hearings.

Department procedures for the administration of the Export Administration Act of 1969 require, whenever practicable, full public disclosure and participation in decisions to establish, modify or terminate short supply export controls.

In negotiating and monitoring international textile and apparel agreements, Commerce is advised by a committee of importers, whose interest tends to coincide with that of consumers. Meetings are held several times a year and are open to the public.

Commerce's newest agency, the National Fire Prevention and Control Administration, was established to work with state and local fire services to combat losses from fire. Each year, fires cause 12,000 fatalities and 300,000 injuries, and cost the country over $11 billion. The agency's goal is to reduce these losses by 50 percent within a generation.

The agency concentrates on education and training; fire data collection and analysis; assistance in improving fire fighter's equipment, fire safety of products, buildings and services; and public education.

NBS' Center for Consumer Product Technology was formed a year ago to concentrate NBS consumer product activities under one office. Within the Center are: appliance labeling, designed to provide information on energy consumption and efficiency of household appliances; a series of reports and pamphlets giving consumers the results of NBS research; and a product performance project, designed to understand consumer needs and develop methods for measuring product performance.

With passage of the Fair Packaging and Labeling Act (PL 89-755), Commerce was authorized to conduct and promote package quality standardization and uniform labeling standards for commodities distributed for retail sale. NBS also has responsibility for development of voluntary product standards.

The agency makes use of consumer sounding boards, surveys and evaluation panels to obtain consumer views, and currently has under study, in cooperation with the Office of Consumer Affairs, a nationwide system for receiving consumer complaint data from state and local governments.

Commerce's National Marine Fisheries Service conducts a new inspection program that helps assure consumers of the quality of fishery products. Under the program, fishery processors and canners pay for federal inspectors to examine their fish and certify that it has been found safe, wholesome and of good quality. Approximately 30 percent of the fishery products processed in the United States are covered by the program.

Consumer Forums

A series of business-consumer forums has been scheduled to help the government and industry learn what consumers think about product information now supplied, and what additional information they might like to have.

The schedule is as follows: February 25, Los Angeles; March 17, Fort Worth; April 14, Minneapolis; May 5, Detroit; June 2, Boston; and June 30, Oakland.

ROCK CREEK
VISTA POINT

SOLAR WAS CHEAPER—*The U.S. Department of Agriculture's Forest Service recently installed the world's first completely solar electrically-operated sanitary facility at a scenic overlook in Montana's Custer National Forest, near the northeast entrance to Yellowstone National Park. A solar electric system was chosen because it was less expensive than the cost of bringing commercial power to the facility. Solarex Corporation of Rockville, Maryland, designed and delivered the system to operate the facility's circulation pumps. Rechargeable batteries in the system store the electrical energy produced directly from the sun by means of the solar electric panels (solar array) to provide continuous power even during darkness. Total cost of the system was approximately $9,700, installed. Solarex is continuing to develop and manufacture solar electric generators that would be able to compete with conventional energy sources. Firm officials say that solar electric generators are highly reliable, quiet (no moving parts), pollution-free, long-lived and require little or no maintenance. They say that, ultimately, this form of solar energy could be used as a principal source of electric power.*

Studies Seek Specific Answers On Nature Of Solar Energy

Solar energy is free, non-polluting and practically limitless.

Aside from these unchallenged facts, there are great areas of ignorance concerning this energy source which holds such great promise.

Scientists at Commerce's National Oceanic and Atmospheric Administration have begun a new program aimed at making precise measurements of solar radiation, and recording how it varies with time, weather, and location.

The program will also provide a new instrument calibration facility, put solar energy data into a form which can be applied to solving energy problems, and conduct research to determine how solar radiation is affected by its transmission through the atmosphere.

The Commerce agency's effort, funded this year by the National Science Foundation, is part of a larger National Solar Energy Program, support by NSF and the Energy Research and Development Administration. The Division of Solar Energy at ERDA will fund this program in the future.

Solar energy is emerging as an important alternative source of energy for human uses, according to Dr. Lester Machta, who heads the program. It has demonstrated potential for heating homes and offices, and, in some locations, is being harnessed to generate electricity, supplementing conventionally fueled powerplants.

But energy is not concentrated in solar radiation as it is in fossil fuel. To use this gift from the sun, some method must be developed to collect and store it. In the engineering process, each "leak" in the collection procedure extends the amount of time or increases the size and cost of the system needed to garner a given amount of solar energy. Variations in time and location complicate the energy-storage problem.

Insolation—the amount of solar radiation reaching the earth's surface—is the key value in designing efficient, economical solar energy conversion systems. But this quantity, although measured regularly over the years, has not been available with the accuracies required for engineering purposes.

The new program is expected to measure insolation to accuracies of 5 percent.

A network of 35 pyranometers—instruments which precisely measure the intensity of solar radiation—will go into operation next year at selected NOAA National Weather Service facilities. Ten of these locations will also be instrumented to take additional special insolation measurements.

Maximum utility

At the same time, specialists at the Asheville, N.C., National Climatic Center of NOAA's Environmental Data Service, will develop new formats for distributing the radiation data, to provide maximum utility to solar energy engineers and scientists.

A new calibration facility has been established by the Air Resources Laboratories of NOAA's Environmental Research Laboratories in Boulder, Colo., to provide calibration and quality control for network instruments, and for a limited number of instruments from other sources.

Additionally, the existing body of insolation data will be studied to determine whether these measurements can provide a radiation "climatology" for the United States.

To do this, NOAA scientists will pick about a dozen National Weather Service stations with reasonably continuous solar radiation records and apply newly-developed computer programs to measurements of past cloudiness and other factors. If successful, this technique will permit estimation of solar radiation values whereever previous insolation and cloudiness measurements exist.

Research on atmospheric transmission of solar radiation is another major portion of the NOAA effort. The agency's Wave Propagation Laboratory will attempt to improve the definition of meteorological effects on solar radiation, particularly those of cloud cover and aerosols (small airborne particles). It will also examine how solar radiation is changed by ozone, water vapor, carbon dioxide, clouds, natural aerosols, air pollutants, and other constituents.

Field work in atmospheric transmission research will include remote probing of the atmosphere with lidars (the laser equivalent of radar), radars, and acoustic sounders, and using laser and electron microscope techniques to determine the source, chemical composition, and meteorological role of aerosols.

Energy Planners Can Foresee Fuel Needs With Weekly Weather Data

A new, weekly weather information service is to be provided to 48 state capitals this winter to help the states cope with the natural gas shortage, which is expected to affect 21 of them with varying degrees of severity.

The service will be provided by Commerce's National Oceanic and Atmospheric Administration (NOAA), and is designed to help the states determine where they stand in heating fuel and project weather effects upon heating fuel needs.

The 48 states of the continental U.S. will begin receiving the service from NOAA's National Weather Service field offices in the next few weeks and will continue to receive it each Wednesday through the heating season.

With the information, state energy advisers should be able to help anticipate natural gas requirements on a week-by-week basis and initiate conservation measures where necessary until warmer weather returns. NOAA will try to provide forecasts sufficiently in advance to make distribution adjustments possible with a minimum of hardship.

Alaska and Hawaii were excluded because neither uses a great deal of natural gas—Alaska because it uses other fuel to a major degree and Hawaii because it doesn't need a great deal of heating fuel anyway.

The weather information service will be supplied by two major components of NOAA, the Environmental Data Service and the National Weather Service.

The Environmental Data Service will provide a base graph showing the normal 30-year curve of accumulated cold weather in each state through the heating season, plus curves showing extremes of cold or warm weather that have occurred in that state.

Each Wednesday the National Weather Service will provide observed and forecast weather information to be compared with these curves.

Shortage areas

The 21 states and areas expected to experience some degree of natural gas shortage this heating season are: Arizona, California, Delaware, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, Maryland, District of Columbia, Missouri, Nevada, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

Both the Environmental Data Service graphs and the Weather Service observations and forecasts will be population-weighted. NOAA scientists have developed a formula through which cold weather reports from a large city, where heating needs will be great, will weigh more heavily than equally cold weather in a sparsely populated part of the state.

The new service employs the "heating degree day," developed many years ago by heating engineers to provide a useful measure of the way cold weather of a given severity and duration affects consumption of heating fuel in the absence of actual measurements of fuel use.

The heating degree day is pegged to a temperature of 65 degrees Fahrenheit, agreed upon as the point at which some amount of furnace heat is ordinarily required to provide a comfortable indoor temperature.

How it's done

When the average temperature for a given day, which is obtained by adding the low and the high and dividing by two, is one degree below 65, that counts as one heating degree day. If the average is two degrees below 65, it is two degree days, and so on, down the thermometer scale. Successive daily totals of degree days are added together to produce the cumulative totals of degree days for a week, a month, or a season.

Weekly statewide degree-day statistics will be provided by the National Weather Service's Long Range Prediction Group. Each Wednesday morning the National Meteorological Center will distribute by teletype population-weighted state degree summaries and forecasts.

This information will tabulate nine values for each state. The first three will be the state's degree-day total for the week ending the previous Sunday, the normal total for that week of the year, and last year's total for that week. The second three values will be the cumulative total of degree days since July 1, 1975, the 30-year norm for the corresponding period, and last year's total for that period. The last three values will be the prediction of total degree days for the week to end the following Sunday, the normal for that week of the year, and last year's total for that week. Two of the days will be observed data and five will be forecast.

The forecast portion of this service is being provided for the first time this year in response to needs generated by the impending natural gas shortage.

NOAA scientists explain the use of 65 degrees as the dividing line between where furnace heat is needed does not imply that 65 degrees is the thermostat level which people will be asked to maintain. The 65 degrees, they point out, is the mean between the outdoor high and low, and the use of this formula usually will result in a constant indoor temperature of 70 degrees.

In addition to the base graphs for the 48 states, highly sophisticated mathematical models are being prepared for Missouri and North Carolina by which population-weighted degree days can be linked specifically to the use of natural gas, excluding other fuels. These experimental models will be based on a "marriage" of degree-day statistics with actual records of natural-gas use provided by industry.

By this means, it is expected that the severity of the natural gas shortage can be quantified much more precisely for these states, making possible better decisions for allocation.

Once the Missouri and North Carolina pilot models have become operational, it is expected that other states will want to develop the same capability for translating degree-day data into qualified natural gas demand. Weather service specialists will be prepared to tell each state energy team how to gather the necessary historical information and how to construct a mathematical model tailored to their natural gas consumption and distribution system.

Each state's model will be different. Once produced, however, it should be a simple matter for the state to assess its position each week.

Under current plans, residential users of natural gas will be the last to be affected, although home users of natural gas may be asked to cut back somewhat on their use so that nonresidential users, such as factories and commercial buildings, will not be cut off completely.

Conference Considers Fire Safety Education

Methods of teaching fire safety to the public were introduced at the first fire safety education conference of Commerce's National Fire Prevention and Control Administration, held November 12-14 at the University of Maryland's Center of Adult Education.

Sixteen public education programs were demonstrated, and participants evaluated each program and discussed methods of distributing program materials to educators around the country. Presentations included educational programs on home inspection and fire brigades, juvenile arsonists, hospital safety community involvement and home escape plans.

According to Howard D. Tipton, NFPCA Administrator, "This conference has been designed to initiate dialogue among individuals and groups involved with fire safety education efforts throughout the country. It is expected to lay the groundwork for regional mini-conferences and educational information exchanges on a nationwide scale."

Climate Study To Probe Gases, Particles Aloft

A new observatory has been established in American Samoa to measure atmospheric gases and manmade particles that may affect the earth's climate.

It is the fourth in a developing network of observatories set up around the world to measure atmospheric constituents which, while they may occur in extremely low concentrations, are likely to have a significant influence on future climate. The network is part of the Geophysical Monitoring for Climate Change program of Commerce's National Oceanic and Atmospheric Administration (NOAA).

Dr. Ian Fletcher and other scientists from the University of Rhode Island, with the support of the National Science Foundation, will spend the next 18 months at the Samoa observatory measuring marine aerosols, or small, airborne particles. They will monitor aerosols of various sizes, chemical constituents of precipitation, and low-concentration gases that are thought to influence climate.

The group will also measure three manmade gases, carbon tetrachloride, and fluorocarbons 11 and 12. Studies are under way at a number of institutions to determine whether fluorocarbons, used as propellants in aerosol cans and in refrigeration, may affect the stratospheric ozone shield, which protects life on the earth's surface from potentially hazardous ultraviolet radiation.

The Samoa observatory and other NOAA observatories in Antarctica, Hawaii, and Alaska can be used to determine long-term changes in the concentrations of carbon dioxide, ozone, fluorocarbons and carbon tetrachloride near the earth's surface and to detect changes in the ozone layer of the stratosphere.

Define man's role

The measurements could help answer the growing number of questions about mankind's contribution to the rare atmospheric gases and their effect on climate. The NOAA program is managed by the Air Resources Laboratories of its Environmental Research Laboratories.

NOAA's global monitoring program began in 1970 when its newly-formed NOAA Geographical Monitoring for Climate Change program set out to establish a small, widely separated network of observatories equipped to make precise measurements at locations far from the centers of civilization.

Two observatories are older than the program itself. The observatories at the South Pole and at Mauna Loa, Hawaii, were established in the late 1950s for the International Geophysical Year by the National Science Foundation and what is now the National Weather Service. The observatory in Alaska, located at Point Barrow, was added in 1973.

The work of the NOAA scientists includes analysis of data for changes and long-term trends in concentrations of the rare gases and aerosols that may modify solar radiation and radiation from the earth, thereby altering the climate. The scientists have developed a numerical model that incorporates both sources and sinks for carbon dioxide and can be used for predicting future carbon dioxide concentrations. Carbon dioxide measurements from the four laboratories are being used to verify the accuracy of the model.

Measurements recorded at the observatories are sent to headquarters of the Geophysical Monitoring for Climate Change program in Boulder, Colo. Scientists there process the data before archiving it at the World Data Center in Asheville, N.C. The center provides for international data exchange.

Thus far, the four NOAA observatories are the only complete operational baseline stations in the world making the particular measurements in which they are engaged. But other nations are planning similar observatories, which would lead to an international data collection program. These observatories will provide raw data that scientists around the world can combine with data on other climatic influences such as the oceans, and climatic indicators such as temperature and wind, in their efforts to understand the causes of climate.

Kentucky Offers Guide To Business Services

A new step-by-step *Guide to Kentucky Business Regulations and Services to Business* is now available from the Kentucky Department of Commerce.

The 25-page guide covers 12 areas of regulation and service: certificate of authority to transact business, construction and safety standards, environmental protection programs, equal opportunity laws, health and sanitation laws, labor and safety laws, licensing and administering agencies, motor transport regulations, regional agencies, taxes, unemployment insurance and services to business.

The following specific areas of business assistance are covered: access roads, financing, tax incentives for pollution control equipment, fire insurance, fuel allocation, industrial training programs, labor surveys and employment recruitment, plant location and business assistance.

Copies are available without charge from Kentucky Business Regulations, Box DCI, Kentucky Department of Commerce, Capital Plaza Tower, Frankfort, Ky. 40601.

Energy Output's Environmental Impact Assessed

Commerce's National Bureau of Standards has joined forces with the Environmental Protection Agency to schedule a series of workshops aimed at determining what kinds of standards are needed for measuring environmental pollution associated with energy production.

Beginning in January, and during the next six months, workshops will be held at NBS headquarters in Gaithersburg, Md. They will consider how many and what kinds of Standard Reference Materials (SRMs) NBS should develop to assist the Environmental Protection Agency in measuring water and air pollution that may result from various types of energy production, specifically uranium mining, mine drainage, geothermal energy, power plant operation, and coal gasification, liquefaction and desulfurization.

The SRMs are materials whose chemical composition or particular chemical or physical properties have been accurately determined and certified. More than 900 are currently available and are used throughout industry and the scientific community to calibrate and evaluate measurement instruments and test methods.

The workshop schedule is: Jan. 20-21, SRMs for Coal Gasification and Liquefaction; Feb. 3-4, SRMs for Coal Desulfurization; Feb. 19-20, SRMs for Power Plant Operation; Mar. 22-23, SRMs for Uranium Mining; Apr. 28-29, SRMs for Mine Drainage; and May 24-25, SRMs for Geothermal Energy Utilization.

Workshops on SRMs for offshore drilling and oil shale processing have already been held.

Five-year program

The workshops are the first step in a five-year NBS program designed to meet the country's environmental measurement needs as alternative forms of energy are developed. Environmental information is needed to help regulatory officials assess whether energy development is occurring with acceptable environmental impact.

The program, funded by the Environmental Protection Agency, is administered jointly by EPA's Office of Energy, Minerals and Industry and by NBS's Office of Air and Water Measurement.

Attendance is by invitation only. Proceedings of the workshops will be published. For information, contact Donald Becker, NBS Energy-Environment Workshop Coordinator, Analytical Chemistry Division, Chemistry Building A309, Washington, D.C. 20234 (301-921-2128).

Recent NTIS Publications

These recent reports of government-conducted or government-sponsored research of possible interest to U.S. businessmen are available from the National Technical Information Service. Prices listed are for paper copies; second prices, where listed, are for microfiche. All others are available in microfiche for $2.25. Order from NTIS, Springfield, Va. 22161 (703-321-8543).

Interfuel substitution in the consumption of energy in the United States. Part I: residential and commercial sector (PB-234 536/CZ). MIT's Energy Lab. 97pp. $4.75.

Optimization study of solar absorption air conditioning system (PB-235 490/CZ). U. of Maryland. 78pp. $4.75.

Energy and security: implications for American policy (AD-785 084/CZ). Hudson Inst., Croton-on-Hudson, N.Y. 145pp. $5.75.

Guidelines to reduce energy consumption through transportation actions (PB-235 983/CZ). Voorhees (Alan M.) & Assoc., McLean, Va. 128pp. $5.75.

Industrial energy study of the plastics and rubber industries, SICs 28 and 30 (PB-236 211/CZ). Forster O. Snell Inc., Florham Park, N.J. 392pp. $10.25.

Reactor safety study: an assessment of accident risks in U.S. commercial nuclear power plants (WASH-1400/CZ). AEC, Washington, D.C. 244pp. $7.60.

Economic analysis of the processing and disposal of refuse sludges (PB-234 498/CZ). Curran Asoc., Northampton, Mass. 85pp. $4.75.

Maritime Administration bulk chemical carrier construction program (COM-74-11353/CZ). Maritime Admin. Environmental Activities Group. 425pp. $10.50.

Key land use issues facing the Environmental Protection Agency (PB-235 345/CZ). Harbridge House, Boston. 381pp. $10.25.

Waste lubricating oil research: innovative approaches to reclaiming used crankcase oil (PB-234 685/CZ). U.S. Bureau of Mines, Washington, D.C. 24pp. $3.25.

On the feasibility of a labor market information system: Vol. I (PB-236 259/CZ). Ann Arbor Inst. of Industrial Relations. 104pp. $5.25. (Three-volume set available for $17 as PB-236- 258-set).

Properties of particleboards at various humidity conditions (AD-784 557/CZ). Forest Products Laboratory, Madison, Wis. 26pp. $3.75.

Aluminum as a component of solid waste and a recoverable resource (PB-235 770/CZ). National Environmental Research Center, Cincinnati. 39pp. $3.75.

Toxicological evaluation of polyvinyl acetate (PVA) emulsion dust control material, May 1973-March 1974 (AD-784-603/CZ). Army Environmental Hygiene Agency, Aberdeen Proving Ground, Md. 31pp. $3.75.

Worldwide distribution of ferromanganese nodules and element concentrations in selected Pacific Ocean nodules (PB-234-011/CZ). Scripps Institution of Oceanography, LaJolla, Cal. 80pp. $4.75.

State of the art: uranium mining, milling and refining industry (PB-235 557/CZ). Robert S. Kerr Environmental Research Lab, Ada, Okla. 123pp. $5.25.

Revised trade designations of plastics and related materials (AD/A-001 856/CZ). Plastics Technical Evaluation Center, Dover, N.J. 229pp. $13.

Corrosion and corrosion protection (PB-237 408/CZ). Transportation Research Board, Washington, D.C. 58pp. $4.25.

Proceeding of the Fourth International Symposium on Packaging and Transportation of Radioactive Materials, Sept. 22-27, 1974 (CONF-740901/CZ). Atomic Energy Commission. 426pp. $11.25.

The effect of lower legal drinking age on youth crash involvement (PB-235 917/CZ). U. of Michigan Highway Safety Research Inst. 220pp. $7.25.

Noise control handbook for diesel-powered vehicles (PB-236 382/CZ). Cambridge Collaborative, Inc., Cambridge, Mass. 214pp. $7.25.

Transportation pooling (PB-236 157/CZ). Alan M. Voorhees & Assoc., McLean, Va. 294pp. $8.75.

Trends in world shipping with particular reference to large crude oil carriers (AD-786 010/CZ). Saclant ASW Research Center, La Spezia, Italy. 30pp. $3.75.

Electric automobiles: a bibliography with abstracts (COM-74-11573/CZ). NTIS. 76pp. $20/$20.

Urban goods movement (PB-235 948/CZ). Transportation Research Board, Washington, D.C. 122pp. $5.25.

Financial methods for solid waste facilities (PB-234 612/CZ). Resource Planning Assoc., Cambridge, Mass. 385pp. $10.25.

Technology exchange: import possibilities from the USSR (AD-787 391/CZ). Rand Corp., Santa Monica. 133pp. $5.75.

Women, work and the law—a legislative review (AD-786 602/CZ). Rand Corp., Santa Monica. 35pp. $3.75.

A survey of inventory theory and practice (AD787 601/CZ). George Washington U. 63pp. $4.25.

Management games—a bibliography with abstracts (NTIS/PS-74/112/CZ). NTIS. 179pp. $25/$25.

Inventory control—a bibliography with abstracts (NTIS/PS-74/121/CZ). NTIS. $25/$25.

The seagoing workforce: implications of technological change (AD/A-000 250/CZ). Maritime Transportation Research Board, Washington, D.C. 123pp. $5.25.

Job satisfaction—a bibliography with abstracts (NTIS/PS-74/122/CZ). NTIS. 232pp. $25/$25.

A study to determine feasibility of determining whether classified ads in daily papers are an accurate reflection of the local labor market (PB-237 066/CZ). Olympus Research, San Francisco. 417pp. $10.50.

Legal, economic and energy considerations in the use of underground space (PB-236 755/CZ). National Committee on Tunneling Technology, Washington, D.C. 129pp. $5.75.

Uniform marriage and divorce legislation: a preliminary analysis (PB-236 781/CZ). National Conference of Commissioners on Uniform State Laws. 878pp. $19.25.

Impact of building code regulations on the manufactured housing and mobile home industries (PB-236 935/CZ). New York State Assembly Scientific Staff. 142 pp. $5.75.

The domestic telecommunications industry: economic behavior, competition and public policy (PB-238 020/CZ). System Applications Inc., San Rafael, Calif. 452 pp. $11.50.

Product liability: an interaction of law and technology (PB-237 447/CZ). Carnegie-Mellon U., Pittsburgh. 158pp. $6.25.

Fire-resistant fibers and textiles—a bibliography with abstracts (NTIS/PS-74/111/CZ). NTIS. 140pp. $25/$25.

Proceedings of symposium on control of fine particulate emissions from industrial sources, Jan. 15-18, 1974 (PB-235 829/CZ). U.S.-USSR Working Group on Stationary Source Air Pollution Control Technology. 716pp. $17.25.

Study of industry response to policy measures designed to improve automobile fuel economy (PB-234 625/CZ). Hittman Assoc., Columbia, Md. 178pp. $7.

Current aviation statistics: airports, air carrier fleet, air traffic activity, aircraft industry, airmen and appropriations (AD-784 430/CZ). Federal Aviation Admin., Washington, D.C. 32pp. $3.75.

Guide Gives County-By-County, Industry-By-Industry Job Data

Commerce's Bureau of Economic Analysis has published a 542-page compendium of detailed employment data by industry for the 50 states and for every county within them.

Regional Employment by Industry, 1940-1970, gives those concerned with economic developments in their communities the long-term detailed data base needed for a better understanding of the economic development in their comover the past 30 years. In addition to overall figures, employment data are shown for 30 civilian industry groups in 1940, and for 35 such groups in 1950, 1960 and 1970. The military is also included.

The single volume is designed for researchers and planners. It is based on Census of Population household surveys which record employment by place of residence of employees. Data have been edited for comparability in terms of the age of the labor force, industrial classification, treatment of employment in cases where industry was not reported to the Census, and geographic uniformity.

For example, those interested in the city (and county) of San Francisco will find that overall employment (by place of residence) grew from 271,306 in 1940 to 331,026 in 1970, a 22 percent increase.

A borough-by-borough look at New York City shows that total employment (by place of residence) increased from 2,839,366 in 1940 to 3,218,167 in 1970, a 13.3 percent increase. Employment showed the greatest growth in Staten Island (Richmond County)—92.0 percent, while the Borough of Manhattan (New York County), registered an actual decline of 8.9 percent over the 30-year period.

Regional Employment by Industry, 1940-1970, Decennial Series for the United States, Regions, States and Counties is for sale for $9.05 by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Order stock number 003-024-01119-1.

Reports Detail How U.S. Manufacturers Ship Their Products

A series of reports on how and what distances U.S. manufacturers ship their goods has been released by Commerce's Bureau of the Census.

The data are derived from the Commodity Transportation Survey, a segment of the Census of Transportation taken every five years by the Bureau. The most recent survey covered activity for calendar year 1972.

In addition to means of transport, origin, destination, distance and weight of shipments for listed commodities are shown in detail for various geographic areas, including production areas. Production areas represent relatively compact geographic concentrations of manufacturing activity.

The reports just released cover data for the following states and their production areas:

Area 1—Connecticut and Massachusetts
Area 2—New Jersey, New York, and Pennsylvania
Area 3—Michigan and Ohio
Area 4—Illinois, Indiana, Iowa, Minnesota, Missouri and Wisconsin
Area 5—Alabama, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia
Area 6—Louisiana and Texas
Area 7—California, Oregon, and Washington
Area 8—U.S. Summary

Copies of the reports, which conclude the Bureau's series based on the Commodity Transportation Survey, are available for $2 to $5 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices.

Sea Grant Funds Wide-Ranging Aquatic Studies

Geologists and engineers from the University of Wisconsin will range as far afield as Alaska on projects undertaken through a $1,125,000 Sea Grant from Commerce's National Oceanic and Atmospheric Administration.

The team will explore mineral deposits in Lakes Michigan and Superior, as well as off the coast of Alaska.

Work will range from evaluating sand and gravel resources in Lake Michigan to devising new methods for commercial extraction of copper and nickel from manganese nodules found in the deep sea.

Several on-going projects in diver safety and technology will be pursued, including: tests on a small gasoline engine for use underwater, which employs the diver's exhaled breath as the oxygen source for combustion; development of a collapsible underwater rescue chamber to allow a diver to surface immediately under pressure in an emergency situation; and refinement of a unique "artificial gill" permitting a diver to exchange his own respiratory gases with those in the water.

The University of Wisconsin's Marine Advisory Service, which serves as the link between the scientists studying marine resources and the resource users themselves, will be able to continue providing information and assistance to industry, government, and the general public on the use and protection of the Great Lakes' resources.

Calendar For Businessmen

Dec. 14-16—Andover, Mass.—Product Opportunities in Graphic Communications, IGC Conference Ctr., Andover Inn. For information, Institute for Graphic Communication, Inc., 375 Commonwealth Ave., Boston, Mass. 02115 (617-267-9425).

Dec. 15-16—New York—First National Metals Commodities Conference, Barbizon-Plaza Hotel. Sponsor: New York University's School of Continuing Education. For information, Ms. Heidi Kaplan, New York Mgt. Center, Dept. 14-NR, 360 Lexington Ave., New York 10017 (212-953-7262).

Dec. 15-19—Miami—Extrusion of Plastics seminar, Deauville Hotel. Sponsor: New York Univ. School of Continuing Education. For information, Ms. Heidi Kaplan (address above).

Dec. 15-19—Chicago—Injection Molding seminar, Water Tower Hyatt House. Sponsor: New York Univ. School of Continuing Education. For information, Ms. Heidi Kaplan (address above).

Dec. 15-19—Los Angeles—Tooling for Injection Molding seminar, Biltmore Hotel. Sponsor: New York Univ. School of Continuing Education. For information, Ms. Heidi Kaplan (address above).

Dec. 28-30—Dallas—American Economics Assn. annual convention, Statler Hilton Hotel. For information, AEA, 1313 21st Ave. South, Nashville, Tenn. 37212 (615-322-2595).

Jan. 9—Jackson, Miss.—Business Opportunity/Federal Procurement Conference, Jackson Hilton Hotel. Sponsor: Congressman Thad Cochran. For information, Jon Hinson, 212 Cannon House Office Bldg., Washington, D.C. 20515 (202-225-5865) or Ms. Carrie Laird, P.O. Box 22581, Jackson, Miss. 39205 (601-909-1353).

INTERNATIONAL COMMERCE REPORT

U.S. Farm Machinery Mission Appraises Sales Prospects In Three Latin Countries

Booming sales prospects in Venezuela, less spectacular but steady improvement in the Colombian market, and a balance of payments problem in Brazil that has turned off sales opportunities there but created lively interest in licensing. This is the way the three Latin American countries looked to a recent U.S. farm machinery trade mission.

After their discussions with commercial farmers, ranchers, agents and local manufacturers, the mission members expect to develop more than $2 million worth of sales from 120 leads they are now pursuing. Major projects in grain storage and handling, poultry facilities and dairy systems offered attractive possibilities to the U.S. group. Four mission members looking for agents submitted this report: two firms appointed, 16 under negotiation.

Products marketed by the mission included a full range of soil preparation equipment; poultry and dairy equipment; grain handling, drying and storage equipment; agricultural pumps; and forage harvesting and handling machinery.

The U.S. firms found the Venezuelan market's boom conditions fueled by eased credit and a government-sponsored agricultural development program; Colombia's market, one of sustained and healthy growth; and, by contrast, short-term sales prospects in Brazil as very limited, according to Mission Director William J. Lynch of the Commerce Department. Investment interest was heaviest in Brazil, however. Harry C. Demuth, DeMuth Steel Products Co., Schiller Park, Ill., new to the market, commented:

"In Sao Paulo I met at least six prospects for a joint venture that seemed promising. . . . I feel sure there is a market for these specialized products in Brazil, and that within three years a joint venture—49 percent owned by us—will be doing a million dollar annual sales volume in this country."

The Venezuelan market for agricultural machinery and equipment was $63 million in 1974 with 25 percent growth likely in 1975, 20 percent in 1976 and between 10 and 15 percent each year through 1979. The United States has a 60 percent share of the import market and is likely to improve its position because of cost competitiveness, superior products, and geographic proximity.

Mission members found Venezuela to be a market for developing customers rather than competing for them. Extended payment terms are not necessary, Lynch reported. Most buyers seem happy with immediate payment through confirmed, irrevocable letter of credit, he observed. The mission found immediate purchase interest for grain drying, handling and storage equipment, hay field equipment and silage harvesters, and forestry equipment. Sales prospects for centrifugal, agricultural pumps and standard tillage equipment are limited.

Martin W. Gangel, of Dalton Cooper & Gates, New York, observed as he left Caracas, "It was a full schedule with many significant interviews with prospective dealers and buyers. We have 10 or 12 new contracts to write to and send literature or offers."

Colombian imports of agricultural machinery and equipment increased from $7.9 million in 1971 to $24.4 million in 1974—an average annual growth rate of 32 percent. Imports are projected to reach $71 million by 1977, the U.S. share in the range of 20 percent. Mission members found credit a critical marketing factor in Colombia so that Eximbank/FCIA programs are a vital part of the American exporter's package.

Colombia has a much larger agricultural base than Venezuela, and despite Colombia's lag in application of new agricultural technology, mission sales there were excellent. The members found keen purchase interest in silos, grain drying and handling equipment, meteorological instruments for agriculture, dairy equipment, forage equipment, and landolanes. As in Venezuela, there was limited interest in pumps and simple tillage equipment.

DISCUSSING FINE POINTS—*During interview in Caracas, mission member John E. Clack (left), Ace Pump Corp., Memphis, uses illustrations to describe his products to customer.*

Leaving Bogota, Richard A. Candee of Gehl Co., West Bend, Wis., reported that participation there was well worth the 'price of admission,' and that appointments were efficiently organized with key sectors of the agricultural economy.

In Brazil, confronted with large balance-of-payments deficits stemming from petroleum imports, the government has taken drastic import control actions, including higher tariffs and a 100 percent prior deposit requirement. In interviews with almost 80 key Brazilian contacts the mission members found immediate purchase interest to be virtually nil. There was, however, dynamic interest in joint ventures and ample demand to support profitable local manufacture of many lines. The Brazilian import market is highly selective; demand exists only for specialized, sophisticated products.

In addition to those already mentioned, firms participating in the mission, and their representatives, were: Ace Pump Corp., Memphis, John E. Clack; Chief Industries, Inc., Grand Island, Nebr., Virgil R. Eihusen; Dunbar Kapple Inc., Batavia, Ill., Henry I. Turner; and Valley Trading Co., Sacramento, George A. Clinton.

U.S. Share Stays Same, In Exports Of Manufactures

The U.S. share of world exports of manufactures, excluding shipments to this country, remained unchanged during April-June from the revised 20.5 percent first quarter share. Although this represents a decline from the level attained during the final quarter of last year, the share level for the first half of 1975 remains slightly above the average for 1974.

The only commodity group in which U.S. exports advanced significantly in the second quarter relative to those of other suppliers was nonelectric machinery where this country's position climbed by half a point to 27.4 percent. In "other" manufactures, the U.S. standing moved up marginally from its 13.3 percent level of the previous three months. The U.S. position weakened in the three other manufactured commodity groups. The most substantial loss occurred in transport equipment where this country's share declined by two full points to 26.3 percent. At the same time, the U.S. share of world exports of chemicals and electric machinery also fell, but much less sharply.

After dropping in the first quarter, U.S. exports of total manufactures rose slightly in the second, although they remained below their peak level of the final three months of last year. Rising sales of nonelectric and electric machinery and transport equipment were nearly offset by declining shipments of other manufactures and chemicals. A 10 percent drop was recorded in exports of the latter, following steady levels of sales since the July-October 1974 period.

A similar pattern was evident with respect to other industrial countries' exports of manufactures, where the largest increases in value were recorded in machinery and in transport equipment. That growth tended to have a positive impact on the overall U.S. position since, coincidentally, these are also the areas in which this country has its largest shares.

During April-June, average exchange rates for each of the supplying countries, as measured by an export-weighted index, generally showed little change from the previous quarter. The French franc, however, appreciated by about 6 percent vis-a-vis the currencies of 67 principal markets, and the U.S. dollar increased an average of 2 percent in the period under review. The export-weighted indexes reflect the relative importance of each of the 67 markets which varies between commodities. The separate indexes indicated that the dollar's largest appreciation from the first to the second quarter, 4 percent, occurred in chemicals while the smallest, 1.5 percent, was in transport equipment. Thus, exchange rates generally had little impact on the relative values of exports from the United States or the other suppliers as a group in the period under review.

U.S. SHARE OF WORLD EXPORTS OF MANUFACTURES

Adjusted for seasonal variation

Commodity	U.S. exports (million dollars)	U.S. share* (% based on export-weighted exchange rates[1])	Commodity	U.S. exports (million dollars)	U.S. share* (% based on export-weighted exchange rates[1])
Manufactures, total			**Electric machinery**		
1973	45,574	19.5	1973	5,094	21.6
1974	64,559	20.3	1974	7,156	23.1
1973 1st qtr.	10,010	19.2	1973 1st qtr.	1,139	21.9
2nd	10,898	19.3	2nd	1,220	21.6
3rd	11,732	19.2	3rd	1,324	21.3
4th	13,035	20.2	4th	1,413	21.7
1974 1st	14,273	20.4	1974 1st	1,606	23.0
2nd	15,825	19.8	2nd	1,743	22.6
3rd	16,861	20.1	3rd	1,925	23.8
4th	17,737	20.9	4th	1,890	22.8
1975 1st	17,371	20.5	1975 1st	1,856	22.6
2nd[2]	17,592	20.5	2nd[2]	1,914	22.2
Chemicals			**Transport equipment**		
1973	5,781	19.0	1973	10,813	27.0
1974	8,891	18.5	1974	14,583	29.2
1973 1st qtr.	1,230	18.5	1973 1st qtr.	2,472	27.4
2nd	1,343	18.7	2nd	2,614	26.7
3rd	1,501	18.5	3rd	2,640	25.6
4th	1,717	20.5	4th	3,084	28.0
1974 1st	2,027	19.5	1974 1st	3,153	30.2
2nd	2,183	17.9	2nd	3,522	27.7
3rd	2,355	17.8	3rd	3,697	28.8
4th	2,332	18.9	4th	4,268	30.5
1975 1st	2,336	19.8	1975 1st	3,921	28.3
2nd[2]	2,088	19.1	2nd[2]	4,084	26.3
Nonelectric machinery			**Other manufactures**		
1973	12,212	25.1	1973	11,674	12.7
1974	16,811	26.4	1974	17,118	13.6
1973 1st qtr.	2,718	25.2	1973 1st qtr.	2,451	11.9
2nd	2,916	25.0	2nd	2,805	12.6
3rd	3,221	25.2	3rd	3,046	12.8
4th	3,412	25.4	4th	3,409	13.5
1974 1st	3,639	25.8	1974 1st	3,848	13.6
2nd	3,987	26.5	2nd	4,390	13.6
3rd	4,434	26.3	3rd	4,450	13.5
4th	4,802	27.1	4th	4,445	13.7
1975 1st	4,939	26.9	1975 1st	4,319	13.3
2nd[2]	5,305	27.4	2nd[2]	4,201	13.4

Note: The term "manufactures" refers to chemicals, machinery, transport equipment, and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war, ammunition.

World exports are defined as exports from the 15 major industrial countries. Percentage shares are based on values excluding shipments to the United States. These nations, which account for 80 percent of world exports of manufactures to foreign markets, are: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan.

* Of world exports to foreign markets.

[1] Shares are based on exports of the five commodity groups from each of the 15 countries, using the official rates of exchange during each period vis-a-vis 67 principal markets. [2] Preliminary.

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Staff's Office of International Trade Policy.

THE PRESIDENT

The President issued Executive Order No. 11888 implementing the U.S. Generalized System of Preferences (GSP). (See article on page 7).

Rambouillet Economic Summit: In the joint declaration issued at the close of this economic meeting, attended by President Ford and the Heads of State of the U.K., France, Germany, Italy and Japan, the participants expressed their belief that the multilateral trade negotiations should be accelerated, and aimed at substantial tariff cuts, significant expansion of agricultural trade, and reduction of nontariff measures, with the ultimate goal of achieving the maximum possible level of trade liberalization. The participants also expressed their willingness to play their part, through the International Monetary Fund and other international forums, in making urgent improvements in international arrangements for the stabilization of export earnings of developing countries and in measures to assist them in financing their deficits. In this context, the leaders stated that priority should be given to the poorest developing countries.

Boycott Directives: The President recently announced a series of decisions to insure that American citizens and firms will be fully protected from any discrimination on the basis of race, color, religion, national origin or sex that might arise from foreign boycott practices. One of the President's decisions was to exercise his discretionary authority under the Export Administration Act to direct the Secretary of Commerce to amend the Act's regulations to prohibit U.S. exporters and related service organizations from answering or complying in any way with boycott requests that would cause discrimination against U.S. citizens or firms. The President also stated that his Administration will not tolerate discriminatory commercial banking practices or policies based upon the race or religious beliefs of any customer, stockholder, employee, officer or director of a bank and that such practices or policies are incompatible with the public service function of banking institutions in the country. (See Commerce Department section).

THE CONGRESS

Bill Passed—Senate: By unanimous vote of 93 yeas, the Senate passed S. Res. 265, after agreeing to committee amendments. This resolution states the sense of the Senate that the Special Representative for Trade Negotiations and other government officials initiate negotiations to develop a code of conduct in international trading.

Bills Reported—Senate: The Committee on Foreign Relations reported adversely, together with additional and supplemental views, S. 961 which would establish on an interim basis a 200-mile fisheries management zone off the coasts of the United States and establish a national marine fisheries management program. By unanimous consent, the bill was referred to the Committee on Armed Services to be reported back to the Senate by Dec. 2. Also reported to the full Senate were H.R. 7727 which would continue through June 30, 1978 the existing suspension of duties on spun silk yarns (by the Finance Committee) and S. 22, which would provide for general revision of the copyright law with an amendment and additional views (by the Judiciary Committee).

Committee Hearings—Senate: The Subcommittee on International Finance of the Committee on Banking, Housing and Urban Affairs marked up and approved for full committee consideration an original bill to regulate foreign investment in the U.S., and to clarify the U.S. position on boycotts and restrictive trade practices against U.S. concerns. The Committee on Armed Services held hearings on S. 961, which would establish, on an interim basis, a 200-mile fishery management zone off the coast of the United States. The Committee received testimony from several Administration witnesses.

The Committee on Commerce will hold hearings beginning Dec. 11 on a wide range of issues concerning East-West trade. Secretary of Commerce Morton, Secretary of the Treasury Simon, and Chairman Casey of the Export-Import Bank and other Administration witnesses will present testimony in December. The hearings are expected to continue in January with testimony from public witnesses.

Committee Hearings—House: The Subcommittee on Trade of the Committee on Ways and Means on Nov. 18 began a series of hearings on Customs administration and valuation of imports. Assistant Secretary of the Treasury David R. MacDonald presented testimony concerning the automobile antidumping investigation and the problems of valuating automobile imports. The Subcommittee also was briefed in executive session on the multilateral trade negotiations by Special Representatives for Trade Negotiations Frederick Dent and Deputy Special Representative Clayton Yeutter.

The Subcommittee on Courts, Civil Liberties and the Administration of Justice of the Committee on the Judiciary held several hearings on H.R. 2223 which provides for the general revision of the copyright law. The Committee's Subcommittee on International Trade and Commerce held a hearing on H.R. 9503 which would repeal the embargo on U.S. trade with North and South Vietnam. The Subcommittee on International Resources, Food and Energy of the Committee on International Relations held a hearing on U.S. international grain sales and management policy. The Subcommittees on Livestock and Grains and Department Operations, Investigations and Oversight of the Committee on Agriculture began joint hearings on H.R. 8933 and related bills, which would designate the Commodity Credit Corporation as the sole agent in selling U.S. grain for export. The hearings will be continued.

The Subcommittee on Oversight and Investigation of the Committee on Interstate and Foreign Commerce continued its hearings on effects of the Arab boycott and availability of information. The Subcommittee voted to recommend to the full Committee that Secretary of Commerce Rogers Morton be found in contempt of Congress for refusing to supply the Subcommittee with certain confidential documents concerning the Arab boycott of Israel. In a statement before the Subcommittee, Secretary Morton noted that in refusing to furnish the documents to the Subcommittee, he was complying with the law, Section 7(c) of the Export Administration Act, as Congress had enacted it and as Attorney General Edward Levi construed the law.

In a Dec. 1 letter to Rep. Harley O. Staggers, Chairman of the Committee on Interstate and Foreign Commerce, Secretary Morton expressed his willingness, in order to settle the controversy amicably and outside the political forum, to make the national interest determination required under Section 7(c) of the Export Administration Act to provide to the Subcommittee, on a confidential basis, all the reports requested by the Subcommittee.

Secretary Morton had made a similar proposal to Subcommittee Chairman John Moss on Nov. 24, but the offer was rejected. The full Committee was to consider the proposal and determine whether a contempt citation against Morton should be recommended to the full House. In his letter, Secretary Morton also supported submitting the question concerning the scope of applicability of Section 7(c) for judicial review. As this column went to press, the issue was still unresolved.

New Legislation: Since the opening of the 94th Congress, 487 trade and related bills have been introduced. Bills not previously reported in this column include: H.R. 10437, to increase the rates of duty imposed on the importation of certain steel and plastic containers; H.R. 10473, to provide a comprehensive program to improve cargo security for property being transported in interstate and foreign commerce; H.R. 10637, to amend the Securities Exchange Act of 1934 to prevent control by foreign persons of American companies engaged in vital industries; H.R. 10220, to neutralize the impact of foreign oil price increases upon the domestic economy, by removing oil import tariffs and establishing a maximum price for domestically produced crude oil, and for other purposes; H.R. 10882, to amend the Export Administration Act of 1969 to strengthen the antiboycott provisions of such Act, and for other purposes; H.R. 10689, to amend the Tariff Schedules of the United States to suspend the duty on jewelry; H.R. 10831, to amend the Tariff Schedules of the United States to provide duty-free treatment for softwood veneers imported for use in making plywood; S. 2593, to assist the states in raising revenues by encouraging more uniform severence taxes on coal and oil shale and to impose a countervailing duty on imported coal and oil shale; S. 2598, to require that meat and meat food products made in whole or in part of imported meat be labeled "imported", to provide for the inspection of imported dairy products, to require certain minimum standards of sanitation, and to require that imported dairy products be labeled "imported"; and S. 2655, to reduce the dependence of the United States on insecure foreign energy supplies by controlling imports, to foster competition in world petroleum markets, to minimize the resource and foreign exchange costs of petroleum imports to the United States, and to allocate petroleum imports equitably.

Discriminatory Trade Practices Barred

The Department of Commerce has revised its Export Administration Regulations to prohibit U.S. exporters and related service enterprises from taking any action that supports any restrictive trade practice which discriminates against U.S. citizens or firms on the basis of race, color, religion, sex or national origin. Reports of requests for such actions must be filed with the Department's Office of Export Administration within 15 business days after receipt. Currently the most frequent instances of such practices involve discrimination by some Arab organizations against persons of Jewish origin.

In addition, the regulations will now require all service enterprises (such as banks, insurers, freight forwarders and shipping companies) receiving a restrictive trade practice request in connection with an export transaction to report it directly to the Commerce Department. Previously, such organizations were required to report such requests to the U.S. exporter who then reported them to the Office of Export Administration.

These changes in the regulations took effect Dec. 1. Forms on which to report receipt of boycott-related requests may be obtained from Exporters Service, Room 1613, U.S. Department of Commerce, Washington, D.C. 20230, or any Commerce District Office.

In addition, the Commerce Department announced that effective Dec. 1, it is not disseminating or making available for inspection any documents or any information on trade opportunities obtained from documents or other materials which are known to contain boycott conditions that seek to impose or foster a restrictive trade practice or boycott against another country friendly to the United States. To assist the Department in the implementation of this policy, the State Department is instructing all Foreign Service posts not to forward any documents or other materials which are known to contain boycott provisions.

INT'L TRADE COMMISSION

Section 201—Import Relief Cases: The Commission recently issued its second and third refusals to grant import relief to domestic producers and manufacturers. In a unanimous decision the Commission found that increased imports of **wrapper tobacco** were not a substantial cause of serious injury to U.S. growers of tobacco used as the outer wrapping of cigars. The decision was based on a finding that decline in U.S. production of large cigars was a more important cause of injury than were increased imports.

In a 3-2 decision, the Commission found that increased imports of certain bolts, nuts and screws were not a substantial cause of serious injury to U.S. manufacturers producing the subject articles.

Upon receipt of a petition filed by the American Cyanamid Co., the Commission instituted an investigation to determine whether ferricyanide and ferrocyanide blue pigments are being imported in such increased quantities as to be a substantial cause of serious injury, or threat thereof, to the domestic industry producing an article like or directly competitive with the imported article. A public hearing in connection with this investigation (the eleventh initiated under Section 201 of the Trade Act of 1974) will be held at Commission headquarters in Washington, on Jan. 13.

Antidumping Cases: The Commission notified the Secretary of the Treasury that imports of **vinyl clad fence fabric** from Canada sold in the United States for less than in Canada are not injuring a U.S. industry. As a result of this finding by the Commision no dumping duties will be imposed.

Upon receipt of advice from the Department of the Treasury that **birch 3-ply doorskins** from Japan are being, or are likely to be, sold at less than fair value, the Commission instituted an investigation to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States. The Commission also amended the scope of its investigation concerning certain **nonpowered hand tools** from Japan to reflect the deletion of battery service tools by the Treasury Department.

Section 337-Unfair Import Practices: A complaint has been filed on behalf of Superior Dry Wall Screw Mfg. Co., Inc. of Landover, Md. alleging that the unlicensed importation of certain **dry wall screws** into the United States and their sale are unfair methods of competition and unfair acts within the meaning of section 337 of the Tariff Act of 1930, by reason of the coverage of such dry wall screws by claims of U.S. Letters Patent 3,861,269. The complaint further alleges that the effect of the unfair methods of competition and unfair acts is to substantially injure an industry, efficiently and economically operated, in the United States. Upon consideration of this complaint the Commission has instituted an investigation to determine whether there is any violation of this section as alleged in the complaint. John Wagner Associates, Inc., Walnut Creek, Calif. has been named as the respondent.

COMMERCE DEPARTMENT

Cuba Trade: The Department recently announced that it will consider favorably, on a case-by-case basis, requests for use of U.S.-origin materials, parts or components in "insubstantial proportion" in nonstrategic, foreign-made products to be exported to Cuba from third countries where local law permits, or policy favors, trade with Cuba. U.S.-origin content will be considered "insubstantial" when it amounts to 20 percent or less of the value of the products to be exported from the third country.

This announcement by the Department is part of the modification recently announced by the Government of certain aspects of the U.S. denial policy as it affects the trade of other countries with Cuba. These modifications are in accord with the adoption by the Organ of Consultation of the Organization of American States on July 29, of a resolution which now permits each member state to determine for itself the nature of its economic and diplomatic relations with Cuba. Requests for further information and authorization to utilize U.S.-origin materials in products manufactured in foreign countries and destined for Cuba should be addressed to the Office of Export Administration, U.S. Department of Commerce, Washington, D.C. 20230 (Attn: Parts and Components).

Restrictive Trade Practices or Boycotts: In response to the President's directive to Secretary Morton, the Export Administration Regulations concerning restrictive trade practices or boycotts have been revised in several important respects. (See box item on page 21).

Yellowfin Tuna: The Department's National Marine Fisheries Service recently proposed several measures to regulate U.S. yellowfin tuna fishing in the Atlantic Ocean. The Service also proposed procedures for imposing import restrictions on any species of Atlantic tuna that is under investigation by the International Commission for the Conservation of Atlantic Tuna. Under this proposal, the Service could impose these restrictions if it determined that tuna under investigation was taken from the regulated area "in a manner designed to diminish the effectiveness of the Tuna Commission's conservation goals."

Adjustment Assistance-Firms: The Department has announced that Indian Head Shoe Co. Inc., Manchester, N.H., has been certified eligible to apply for adjustment assistance. The firm is a manufacturer of **ice skates and athletic shoes for men, women, and children.** Indian Head Shoe is now entitled to apply to the Department's Economic Development Administration for adjustment assistance—financial and technical—under a program designed to assist in the recovery of firms which have been adversely affected by the impact of increasing imports.

The Department also released a report to the President stating that few firms producing doorskins would be able to qualify for certification of eligibility to apply for adjustment assistance. The Department's report concludes that, although there has been no substantial evidence of an absolute increase in U.S. imports of doorskins, imports did increase relative to domestic production. This relative rise is due to a drop-off in domestic shipments. As of Nov. 4, no producers of doorskins had petitioned for eligibility to apply for adjustment assistance. This report is the result of a study conducted in conjunction with the International Trade Commission's Section 201 Import Relief investigation concerning birch doorskins (see *Commerce Today*, Nov. 10).

Investigation - Firms: Upon petitions from the following firms, the Department recently instituted investigations to determine whether increased imports contributed importantly to the separation of workers, or threat thereof, and to a decrease in sales of production: Glamorise Foundations, Inc., New York, **(women's body supporting garments;** Vermont Marble Co., Proctor, Vt. **(marble);** and Wisconsin Shoe Co., Milwaukee **(men's shoes).**

TREASURY DEPARTMENT

Antidumping Cases: The Department announced the determination that **rechargeable sealed nickel-cadmium batteries** from Japan are not being, nor are likely to be, sold at less than fair value within the meaning of the Antidumping Act of 1921. Information received from the exporters of the batteries concerning the justification for the adjustments of the home market price necessitated by direct labor and assembly costs was taken into account by the Department in making its determination.

The Department also announced an amendment to its finding of sales at less than fair value of certain **non-powered hand tools** from Japan. The amendment deleted **battery service tools** from the case.

LABOR DEPARTMENT

Adjustment Assistance - Workers: The Department certified workers at several firms as eligible to apply for trade adjustment assistance. The Department found that these workers have become unemployed as a result of increased imports. The workers certified had been employees of the following firms: approx. 1,200 workers at Armco Steel Corp., Baltimore **(stainless steel);** 570 workers at Randy Mfg. Co., Inc., Randolph, Mass. **(canvas footwear);** app. 300 workers of Billing Shoe Co., Rockville, Pa. **(women's footwear);** 205 workers of Harrisburg Mfg. Co., Harrisburg, Ark., and 35 workers of Johansen Brothers Shoe Co., St. Louis **(women's footwear);** 140 workers of Clarostat Mfg. Co., Orange, Va. **(fixed and variable resistors);** 145 workers of Jayson Shoe Mfg. Co., Inc., Birch Tree, Mo. **(children's and misses' footwear);** 30 employees of Bendix Corp., Elyria, Ohio **(air brake valves and other non-compressor components);** 65 workers of Murata Mfg. Corp., Rockmart, Ga. **(ceramic capacitors);** 420 workers of Oneida Limited, Sherrill, N.Y. **(stainless steel flatware);** 100 workers of Midwest Handbag Co., St. Louis **(ladies' handbags);** 1,000 employees of Latrobe Steel Co., Latrobe, Pa. **(tool steel and special alloys);** and 150 workers of American Bosch, Springfield, Mass. **(fuel injection systems).**

The Department denied petitions for trade assistance for workers of the following companies: 350 workers of Wire and Cable Division, Anaconda Co., Hastings-on-Hudson, N.Y. **(copper wire and cable);** 40 workers of Kay-Townes, Inc., Rome, Ga. **(television antennas and components);** 25 workers of General Electric Co., Lamp Plant, Youngstown, Ohio **(incandescent lamps);** 60 workers of GE Coil Plant, Austentown, Ohio **(coils for incandescent lamps);** 120 workers of Bekaert Steel Wire Corp., Rome, Ga. **(bead wire, tire cord, hose reinforcing wire);** 90 workers of GE Co.'s Electronics Park, Syracuse, N.Y. **(monochrome television picture tubes and cathode ray mounts);** 80 workers of GTE Sylvania, Inc., Lamp Plant, Salem, Mass. **(incandescent lamps);** 200 workers of Avon Sole Co., Avon, Mass. **(rubber soles, soling sheets and heels);** 200 workers of Harrington and Richardson, Inc., Gardner, Mass. **(sporting firearms);** 50 workers of Servco Heel Co., Bonne Terre, Mo. **(heels for women's shoes);** 365 workers of Globe-Union, Inc., El Monte, Calif. **(electronic components);** 100 workers of St. Marys Carbon Co., St. Marys, Pa. **(carbon brushes);** 40 workers of Alliance Mfg. Co., Inc., Shenandoah, Va. **(fractional horsepower motors)** and 7 workers of Amerada Hess Corp., Woodbridge, N.J. **(petroleum products handlers).**

Investigations—Workers: Investigations to determine eligibility for adjustment assistance were instituted on behalf of workers of about 100 companies, mainly in clothing, footwear and electronics.

U.C.-EEC Consultations: The Eleventh Round of the semi-annual U.S.-EEC Consultations was held in Washington Nov. 18-19. Under Secretary of State for Economic Affairs Charles Robinson headed the U.S. delegation. Finn Gundelach, Acting EEC Commissioner for External Relations, led the EEC side. The consultations covered relations with third countries, multilateral and bilateral trade questions, North-South relations, energy, and the general economic situation. Both sides agreed on the importance of moving ahead rapidly in the GATT multilateral trade negotiations.

INTERNATIONAL

Canadian Antidumping Cases: The Canadian Anti-dumping Tribunal found that the dumping into Canada of **artificial brick** for use as decorative wall covering, produced by the VMC Corp., Woodenville, Wash., "has caused, is causing and is likely to cause material injury to the production in Canada of like goods." As a result of this finding, dumping duties will be imposed. The Anti-dumping Tribunal has also initiated an inquiry upon the receipt of a preliminary determination of dumping into Canada of **live or active yeast** produced by Anheuser-Busch, Inc., St. Louis.

Trade Fairs, Centers

Pollution Control Equipment Show, Singapore, Draws Southeast Asians

Antipollution activities in Southeast Asia have reached the stage in which U.S. technology and equipment find a ready market, as evidenced from an exhibition at the U.S. Regional Trade Center in Singapore.

Officials from eight countries who came to the show were interested in equipment that counteracts oil spills, measures water contamination, monitors toxic gas levels, filters air and water, or compacts solid wastes and refuse.

Efforts by the Singapore Government to control pollution and conserve the environment, and growing concern about pollution among neighboring Southeast Asian countries, made the Center an excellent location for such a show. A U.S. Department of Commerce market survey conducted prior to the exhibition revealed that many countries in the region had budgeted or had plans to spend large sums on pollution control projects.

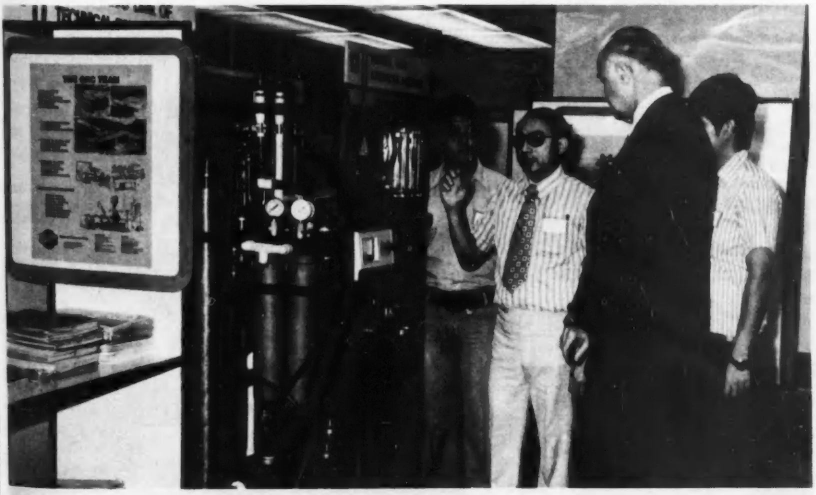
Air pollution is probably the most serious current pollution problem in Singapore—resulting in a continuing market for bag filters, wet scrubbers, smoke detectors, flow meters, and other instrumentation. For water pollution control, massive sewage and drainage improvement programs are under way. In the area of oil, the market for preventive and clean-up marine pollution equipment, though currently small, has high potential. The most salable items are chemical dispersants, booms, pumps and vacuum systems, and diesel intake filters. A large incineration plant for solid waste disposal, to be completed by early 1977, will supplement current land fill techniques. Equipment needed will include electrostatic precipitators, afterburners, fans and blowers.

The 16 participants projected 12-month sales as a result of the show at $7 million; floor sales totaled $173,000. All six exhibitors who were seeking regional representation were either able to sign contracts with local firms or entered into negotiations with potential representatives. Some of the outstanding successes:

The Whittaker Corp., projected $1.2 million in new exports of its oil-spill boom and survival capsules. International Sensor Technology, new to Southeast Asia, sold $4,000 worth of toxic gas monitoring instruments off the floor and projected further sales of $100,000 over the next 12 months. Oil Mop, Inc., also new to the market, gave a live demonstration of its patented absorbent method of recovering oil spills, and a simultaneous demonstration of its oil/water separators—a "show stopper" that gained the company immediate publicity. Bausch & Lomb, which introduced its new water-sampling kits to Southeast Asia, projected more than $65,000 in sales from the show.

"Dramatic increase in business expected as a result of the exhibition. Good, meaty leads," commented Kenneth E. Molinski, director of Sime Darby Engineering, representing Vortec Corp.

Of the almost 1,000 who attended, 15 percent were from the countries outside Singapore, breaking the previous record.



LOOKING OVER THE SHOW—*U.S. Ambassador John H. Holdridge (second from right) listens as California firm's representative explains reverse osmosis water treatment system displayed at pollution control event, U.S. Regional Trade Center, Singapore.*

U.S. MACHINE IN MOSCOW — *During office equipment fair, F. D. Fesenko (center), Deputy Minister in Ministry of Internal Trade, listens to NCR representatives.*

U.S. Office Machines Impress High-Level Officials In Moscow

Soviet visitors to a U.S. exhibition in Moscow showed interest not only in computers and peripherals but also in hand tools and machinery for making computers, in data storage/retrieval systems, and in audio-visual equipment. The U.S.-exhibition was a part of the Soviet Union's second international Exhibition of Equipment and Appliances for the Mechanization of Design, Technical, and Office Work.

The U.S. exhibitors were particularly impressed by the number of high-level Soviet officials who visited their booths to discuss both short-term and long-range needs. Minister K. N. Rudnev of the All-Union Ministry for Instrument Making, Automation Equipment and Control Systems visited the U.S. stands at least six times. Other important visitors included K. T. Mazurov, First Deputy Chairman of the USSR Council of Ministers; I. V. Arkhipov, Deputy Chairman of the USSR Council of Ministers; N. K. Baybakov, Deputy Chairman of the USSR Council of Ministers and Chairman of the State Planning Committee; and V. A. Kirillin, Deputy Chairman of the USSR Council of Ministers and Chairman of the State Committee for Science and Technology.

Negotiations for the distribution of *Datamation* magazine within the Soviet Union were completed by its publisher, a participant in the U.S. display.

As reported in the Oct. 27 issue of *Commerce Today*, the 23 U.S. exhibitors reported off-the-floor sales aggregating $1.6 million, and projected 12-month sales at $14.2 million.

POURING IT IN—*Robert J. Scroggs and John A. Cooper of Ortec, Inc., demonstrate a piece of their firm's equipment during exhibition at Tehran U.S. Trade Center.*

New Iran Price Controls Dampen Instrument Sales

A mixed sales picture emerged from a recent industrial and scientific instruments and controls exhibition at the Tehran U.S. Trade Center.

Demand for the more sophisticated instruments in Iran is limited, because of the small number of end users in specialized industries and because of the reluctance by agents and distributors to buy or stock new equipment during this period of vigorously enforced price controls by the government. New regulations limit the profit structure on imports as well as on items of local manufacture, causing businesses to defer restocking their inventories.

Nevertheless, the 25 participants representing 28 U.S. companies sold more than $500,000 worth of equipment during the event, and anticipate sales in the next 12 months of some $4 million. Response to the items displayed was reported as follows:

Process controls. This group as a whole did well. Iran is planning a number of refineries and petrochemical plants and several U.S. firms expect to figure prominently in this expansion.

Hospital/medical laboratory equipment. Although this group did not meet expectations, diagnostic equipment using ultra-cold analyzing equipment was one of the brightest spots in the show. As for research-related instruments, an exhibitor commented that Iran will not be ready for several years.

Electronic industry equipment. Performance in this category was considered favorable.

Electrical industry equipment. The market offers many such items and buyers are not interested in additional lines. A corrosion control system is expected to sell well, but oscilloscopes and sequential-events recorders evoked little interest.

The Iranian Government recently has frozen budgets in the various ministries—a direct result of lower-than-projected oil revenues for 1975. This factor contributed to the smaller-than-expected attendance; but most of the exhibitors observed that those who did come were genuinely interested.

NUCLEX 75, Basel, Reflects Swing To Medical Equipment

Reflecting some of the changes in the ever-developing worldwide nuclear technology field, customer interest at the U.S. exhibition at a recent major European nuclear equipment fair appeared to swing to components, instruments and particularly medical equipment. The event was NUCLEX 75 in Basel, Switzerland, which brought together 433 exhibitors from 25 countries, including 38 in the U.S. pavilion organized by the Commerce Department.

Both technological and political developments affect nuclear equipment sales, altering directions that could make today's state-of-the-art obsolete. If current trends noted at the fair continue, however, radiation monitoring systems, equipment for handling radioactive materials and radioactive waste purification systems should do well in the world marketplace.

Selling heavy components in Europe is likely to be difficult, as most countries, with the exception of Belgium and perhaps the Netherlands, are already manufacturing such components designed to their own specifications or are preparing to do so. However, there is potential for selling the auxiliary specialized types, such as pipes and valves.

Nuclear equipment does not lend itself to immediate sales; purchases can, and do, often take several years to conclude. But the U.S. exhibitors are looking toward some $37.4 million worth of sales in the next 12 months, and feel that the contacts made will continue to be rewarding over the next several years.

NUCLEX is recognized as the most important European nuclear show, and this year's edition was the first since 1972. "We could not afford not to have been there," observed Leon Eisenmann, of Leico Industries, Inc., New York.

Engineering Show, Montreal

A show featuring equipment and systems for plant engineering, maintenance and industrial production is to be held at Place Bonaventure, Montreal, June 1-4. Open to the trade only, this biennial show, which drew 12,000 trade visitors in 1973, is being sponsored by the American Institute of Plant Engineers. The institute will hold its annual meeting in Montreal during the show. Write: Jack McLean, Industrial and Trade Shows of Canada, 481 University Ave., Toronto, Ontario M5W 1A7; phone, 416-595-1811.

ENERGY INCORPORATED
Nuclex
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U.S. EQUIPMENT IN BASEL—*Visitors at a U.S. booth during Nuclex 75 talk about the new radioactive waste calciner on display. Thirty-eight U.S. firms exhibited in this event.*

Worldwide Business Outlook

Greece, With Economy Under Control, Begins Thinking Of Long-Term Needs

The Greek economy is responding to the government's mildly reflationary fiscal and monetary policy. A modest upswing in secondary production, led by a revival in construction activity, together with a good harvest, seems to ensure a 2-3 percent real growth in GNP for 1975, according to the U.S. Embassy in Athens.

Inflation is still a problem, although recent trends in the wholesale price index may signal some relief for consumers. The balance of payments situation is evolving a little less unfavorably than the government had anticipated. According to figures for the first eight months of 1975, exports continue their strong upward trend and tourism is rebounding vigorously from last year's slump. The current account deficit for this year, however, will probably be around last year's record $1.2 billion. Official borrowing of $500-600 million will be required to keep reserves over the level for two months' imports, and the medium-run balance of payments remains a source of serious concern to government leaders. On balance, however, Greek businessmen seem more optimistic than a few months back that next year will bring further improvement in the economy.

Looking toward Europe

On June 12 Greece applied for early full membership in the European Economic Community. The preferred Greek scenario would allow two and a half to three years for the negotiations and ratification procedure, followed by a five-year transitional period. Prime Minister Caramanlis regards Community membership as an anchor for Greek democracy and, in a series of visits to Paris, Rome, London and Bonn, he has been successful in obtaining expressions of political support. From an economic point of view, Greek officials believe that the additional financial and technical assistance which full membership would promote can significantly increase the rate of Greece's economic development. The current consensus in Greece is that the economic and political benefits of early membership clearly outweigh the interim strains to certain sectors, notably agriculture; that early membership does not necessarily involve a significant acceleration of the Treaty of Athens schedule, which provides for the dismantling by 1984 of trade barriers affecting Common Market products; and that the economy can cope successfully with, and even benefit from, the challenges of integration.

Discussions are under way on agricultural harmonization, and the Community is deliberating a second financial protocol for Greece.

For the first time in several years, and certainly since the collapse of the junta, the government seems to have short-range economic problems well enough in hand to begin to look to the nation's long-term needs. The decision to seek early full membership in the Common Market has served to focus attention on the urgent need for structural reform in the economy.

The Ministry of Coordination and Planning and a revivified Center of Planning and Economic Research are in the process of formulating a new Five-Year Plan for 1976-80, which will provide a blueprint for the reform. Government leaders acknowledge the constructive role which foreign capital, technology and management techniques can play in the restructuring process.

The National Bank of Greece, the Hellenic Bank for Industrial Development and the National Investment Bank for Industrial Development have formed, with strong government support, a consortium to identify significant projects, fund feasibility studies and generally promote and channel both domestic and foreign investment capital.

U.S. exports to Greece during January-May (based on customs data) reached $174 million, a 45 percent increase over the same period in 1974, and 9 percent of total Greek imports. U.S. sales of foodstuffs rose 225 percent to $88 million. Machinery and transportation equipment accounted for sales of $33 million, and other manufactured goods $23 million.

Brighter prospects for economic growth in 1976 offer improved prospects for U.S. exporters. Long-range market potential, considering Greece's impressive economic development over the past two decades, is promising. Energetic salesmanship and competitive financing remain key factors and, together with the high reputation for quality which American goods enjoy, can serve to counterbalance the recent appreciation of the dollar vis-a-vis the drachma (up about 15 percent since the March severing of the dollar/drachma link), and the progressive reduction in Greek tariffs on Common Market products provided for in Greece's Association Agreement.

A broadened and responsive U.S. Export-Import Bank program will increase U.S. competitiveness, and the presence of U.S. branch banks in Greece's three main commercial centers can facilitate initial and sustained market penetration. At the end of July, only 7 percent of Greece's outstanding supplier credits were provided by the United States, compared to 24 percent by Western Germany, 15 percent by France and 13 percent by Italy.

Greek exports to the United States during January-May rose 16 percent over the same period of 1974 to $51 million (based on customs data). Tobacco, manufactured goods and crude materials led the list of Greek products shipped to the United States during the first five months. Greece continues to benefit from a traditional current account surplus with the United States—over $500 million in 1974—due to net receipts for shipping, tourism and emigrant remittances.

Areas of special interest

The Greek Government and its agencies are potential customers of U.S. firms each year for large amounts of equipment and supplies obtained through international tenders. The government recently announced that the 1975 overseas procurement program would total $225 million (excluding agricultural and most petroleum products), the largest categories being machinery and plant equipment, telecommunications and transportation equipment, and scientific instruments. In addition, the government purchases some agricultural commodities directly. Corn imports, an area in which the United States has traditionally been a major supplier, are expected to reach 850,000 metric tons during FY 76, a 20 percent increase over FY 75.

Although budgetary limitations have resulted in delays in many major public works projects (such as the Athens subway), the Mornos River project continues, and tangible progress has been made in negotiations between Lockheed Air Services and the Greek Government on establishment of the National Aviation Equipment Industry. With signs of improvement in the economy, government planners are once again looking to the future. Construction of a new Athens airport is once again under consideration, and a further study by international experts will be made.

Government plans to expedite the use of local energy resources, particularly lignite and oil, may generate U.S. export opportunities. The Public Power Corporation's tentative plans call for a doubling of electric power generation capacity by 1985, with the addition of hydroelectric and lignite-fired plants and, toward the end of the period, the completion of Greece's first nuclear unit.

The modernization and expansion of Greece's commercial telecommunications facilities and rail system offer other potential outlets for U.S. products. Olympic Airways, now owned and operated by the government, is in the process of enlarging its medium-range fleet and is giving serious consideration to purchases of long-range aircraft.

World Bank and European Investment Bank project-tied financial assistance will create a demand for equipment in a variety of fields, including irrigation, education and road construction.

The government's decision to spur economic development should stimulate demand for industrial and mining equipment. The Scalistiri Group, for example, announced on Sept. 26 a $50 million project for the manufacture of refractory magnesia from sea water and dolomite and two U.S. firms will provide technical assistance.

Sectors in which American equipment should have good to excellent export potential include: aviation; construction; mining; food processing and packaging; commercial and industrial refrigeration; air-conditioning; scientific instruments; pollution and environmental control; medical care and pharmaceuticals; hotels and tourism; and port equipment, shipbuilding, ship repair and marine supplies.

Foreign investment in Greece under basic investment law 2687 has been inhibited by worldwide economic conditions and by the Cyprus crisis and its aftermath. Top-level officials have gone on record consistently since the Caramanlis Government took office last year in support of mutually beneficial foreign investment, acknowledging the importance of foreign capital and technology in the modernization of the Greek economy. The revision of some aspects of certain investment contracts signed during the junta period, which the government feels were contrary to the national interest, and the occasional bureaucratic difficulties in getting a business under way contribute to some investor uncertainty at the moment. The government is aware of these problems, however, and is taking definite legislative and administrative steps to further improve the investment climate.

Areas of particular promise include mining and minerals (alumina, magnesite, asbestos, chromite, petroleum, etc.), petrochemicals, food processing, and a variety of heavy and light industries. Given this year's resurgence of tourism, this sector may once again in the near future become a major attraction for foreign capital. By mid-1975, U.S. dollar inflows under basic investment law 2687 amounted to about $400 million (out of a total of $600 million).

In addition to law 2687 investments, more than 1,000 shipping, commercial and industrial firms operate under laws 89 and 378 which grant tax-exempt status to regional supervisory offices. Local officials believe that many new firms may seek to locate in Athens because of the recent problems in Beirut.

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BIG ATTRACTION IN GREECE—*Potential customers throng to see products of the world at the 40th International Fair of Thessaloniki, Aug. 31-Sept. 14 of this year.*

Bahamians Hope That 1976 Brings Renewed Activity

Bahamas' economy continues to hold its own in the face of worldwide economic difficulties, reports the U.S. Embassy in Nassau. Foreign reserves continue to increase despite the quadrupling of the Bahamian oil bill since 1973. The annual rate of inflation has slowed considerably and is one of the lowest in the world.

Tourism is the mainstay of the Bahamian economy and the country continues to be the most popular non-U.S. offshore destination in the Western Hemisphere. The Bahamas receives more tourists than Jamaica and Bermuda combined. Although two major hotels in Freeport have closed and tourist arrivals are down from 1973 levels, three important indicators are up—visitor days, average length of stay and tourist expenditures.

While there is still concern about the possibility of the economy stagnating, economic planners are cautiously optimistic that a period of renewed economic activity will occur before the end of 1976.

Competitive edge for U.S. goods

U.S. consumer goods have a competitive edge, because Bahamians are heavily exposed to Miami television, radio and newspaper advertising. The quality, shorter delivery time, lower freight costs, ease of ordering and favorable exposure of U.S. products, and better financing more than offset the slightly lower customs duty advantage enjoyed by goods from the United Kingdom and Commonwealth countries.

U.S. exports accounted for 67 percent of Bahamian imports excluding oil in 1974 (59 percent in 1973). Since 1971 Bahamian imports have been steadily increasing, reaching $313.6 million in 1974.

Major export opportunities do or will exist for equipment for oil transshipment terminals, refineries, and related areas such as a ship repair facility. As new industrial and agri-business investments come to the Bahamas, opportunities will exist for capital goods in factory equipment and farm machinery. The government will also need additional equipment for improvement of water and sewerage systems. In view of relatively high labor costs, the hotel industry is in the market for labor-saving products, fast-food preparation equipment, and convenience-type foods.

New interest is being shown by prospective foreign investors, following a period of hesitancy which resulted from concern about the Bahamianization policy and political uncertainties attendant on the general elections of 1972 which led to independence. U.S. investments, estimated at just over $1 billion, account for more than half of direct foreign investment in the Bahamas. The largest single U.S. investment is the BORCO refinery and transshipment terminal ($300 million), with the tourist sector accounting for the major share of other U.S. investments. Other estimated direct foreign investment is: Canada, $300 million; United Kingdom, $145 million; and Germany, $10 million.

Investors in the Bahamas, both foreign and domestic, benefit from the tax-haven status of the country, e.g., there are no corporate, capital gains, profits' or personal income taxes. Other incentives for investors are offered through the Industries and Hotel Encouragement Acts. These grant relief from import duties for plant machinery, tool equipment, raw materials and, in the case of hotels, material and furnishings imported for construction. There is, however, a moratorium on the building of additional hotel rooms in Nassau and Freeport at the present time.

Both government officials and private individuals concerned with attracting new investment to the Bahamas are optimistic for 1976. They expect the following factors to greatly improve investor interest: the advent of One-Stop Charters; implementation of the Generalized System of Preferences of the 1974 U.S. Trade Act; the ACP Lome Agreement with the EEC (which accords tariff benefits to certain developing countries); and a hoped-for upturn in the U.S. economy.

The Bahamian Government is actively seeking new foreign investment and opportunities exist for investment in export-oriented, tourist support, import substitution and light industries. Opportunities in tourist and resort developments are still excellent. Capital-intensive investments with an already established market are most propitious.

Bahamianization of the work force is one of the principal aims of the government; therefore, the use of foreign personnel should be limited as far as possible. Work permits are issued to expatriates when no qualified Bahamian can be located to fill the position. Although there can still be administrative delays in issuing permits, the situation has eased a great deal, and this should be an additional factor in improving the investment climate. While not required, it would be useful if investors considered manpower needs over a 2 to 5-year period and prepared a realistic program of Bahamianization — including training — for as many positions as possible initially held by expatriates.

Prospective investors should contact the Ministry of Development (P.O. Box 1611, Nassau) and the Bahamas Development Corporation (P.O. Box N-4940, Nassau), and are invited to discuss their projects with the Economic/Commercial Section at the American Embassy (P.O. Box N-8197, Nassau), located on Queen St., telephone 809-322-1700.

ANCOM Outlines Its Petrochemicals Plan

The Andean Common Market (ANCOM) has officially approved its petrochemical industry program (Decision 91), allocating production of 56 significant petrochemical products to one or more countries. The principal plastic resins—ethylene chloride, vinyl chloride, phtalic anhyride, low and high density poliethylene, polystyrene, suspension grade PVC and PVC copolymers—are assigned to all six member countries.

Some of the assigned commodities are already produced in the Andean region and an increase in trade should develop in the near future. Feasibility studies must be prepared within 30 months for new projects and production must begin by 1982. A special provision allows the installation of production facilities even if the product is not assigned to the respective country. All production would have to be exported outside ANCOM.

Tariff concessions for assigned products will tend to establish monopoly privileges. Imports from non-Andean sources will face a common external tariff of 20 to 35 percent ad valorem on c.i.f. value. The low level applies to petrochemical feedstocks. The tariff on almost all other products is 30 percent.

The investment required to put the program into effect is estimated by the Secretariat at about $2,500 million, by country (in millions) Bolivia $250, Chile $380, Colombia $600, Ecuador $320, Peru $420, and Venezuela $530. Technology accounts for $500 million of the total and equipment requirements for $800 million. Civil engineering, auxiliary facilities, installation and start-up account for the remaining $1,200 million.

The program signifies an opportunity for Bolivia to utilize its abundant natural gas resources. Location of possible plants and other details are still undefined. In Chile, the program will facilitate the consolidation and expansion of existing petrochemical industry, particularly in plastic resins. The program will help integrate the synthetic fibers industry in Colombia and allow for additional production of plastic resins and synthetic rubber. Ecuador will require a new petrochemical refinery at Esmeraldas to establish a complex with adequate economies of scale.

Peru will have immediate access to the market for the acrylic fibers now produced. However, longer-term development depends on availability of sufficient oil for construction of a large complex at Bayovar. Venezuela is in an understandably favored position with good infrastructure at Tablazo and ample petroleum resources. The Venezuelan Government is moving rapidly to develop production facilities.

A report, *Andean Pact: Petrochemical Industry Program*, DIB 75-10-025, is available for $3.25 from National Technical Information Service (NTIS), U.S. Department of Commerce, Springfield, Va. 22151.

For a discussion of recent progress toward economic integration in the Andean region see *Commerce Today*, June 23, pp. 28-29.

New CARICOM Tariff

The Caribbean Common Market (Caricom), consisting of Antigua, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Lucia, St. Kitts-Nevis-Anguilla, St. Vincent and Trinidad and Tobago, has announced that a common external tariff (CXT) is targeted for implementation Jan. 1.

The CXT will apply to all countries outside Caricom and will thus effectively eliminate the traditional reverse preferences accorded British Commonwealth countries. This should prove a definite competitive advantage for U.S. exporters. Caricom partners continue to inter-trade most items duty-free.

The new CXT tariff should be available next month. Inquiries may be addressed to the Office of International Marketing, BIC, Room 4036, U.S. Department of Commerce, Washington, D.C. 20230. Information on new duty rates will be supplied as soon as the new tariff is available.

Calendar For World Traders

Dec. 10-12—Ann Arbor—Seminar on Developing Opportunities in the Middle East: A Growing Market for Investment and Consumer Goods (special emphasis on Iran and Saudi Arabia). Sponsored by Graduate School of Business Administration, University of Michigan. For information, 313-763-1387.

Dec. 11—Chicago—International Trade Club meeting. Tom Moore of the Bureau of International Commerce will discuss Investment in Southeast Asia.

Dec. 11-12—New York—Seminar on Improving Foreign Credit and Collection Techniques, World Trade Institute.

Commercial Holidays Listed For More Than 100 Nations

Respect for the Aged Day, Matilda Newport Day and Unity Day are unfamiliar to most Americans but are the occasion for business holidays in, respectively, Japan, Sept. 15; Liberia, Dec. 1; and Italy, Nov. 4.

These are some of hundreds of commercial holidays abroad that U.S. businessmen are advised to consider in planning overseas business travel. In fact, there are only a few days in 1975 when there will be no commercial holidays somewhere in the world that will probably close both business and government offices in the celebrating countries.

On this and following pages, commercial holidays are listed for more than 100 countries, presented alphabetically, around the world.

The list was compiled from data assembled by Commercial Officers at U.S. Foreign Service Posts abroad.

Many commercial holidays occur on different calendar dates from year to year. Holidays and even weekends often vary from country to country, and from region to region. Some holidays do not recur from one year to the next, while other holidays may vary in duration as well as calendar date.

In cases where holidays fall on Saturday or Sunday commercial establishments may be closed on the preceding Friday or following Monday.

For many countries, such as those in the Moslem world, holiday dates can be only approximate (marked est.) because they are based on the lunar calendar. Note that references to the Moslem holidays often vary in spelling and dates, and that businesses in many Moslem countries are closed on Fridays.

The calendar is intended as a working guide only. Corroboration of dates is suggested in final business travel planning.

Although U.S. holidays are not included in this schedule, they should also be considered when appointments are made with U.S. Commercial Officers abroad.

AFGHANISTAN—Jan. 12 est. (Tenth of Moharram), March 13 est. (Milad-e-Nabi), March 21 (Nawroz), May 27 (Independence Day), July 17-19 (Republic Day), Aug. 28 est. (First of Ramazan), Aug. 31 (Pashtunistan Day), Sept. 9 (National Assembly Day), Sept. 26-28 est. (Id-e-Fitr), Oct. 15 (Deliverance Day), Oct. 24 (United Nations Day), Dec. 2-5 est. (Id-e-Azha).

The Afghan Government and many business firms observe a workweek of Saturday through Wednesday and Thursday morning.

ALGERIA—Jan. 1 (New Year's), Jan. 4 est. (Moharram), Jan. 13 est. (Aashura), March 15 est. (El-Mouloud en Nabaoui), May 1 (May Day), June 19 (Awakening for National Recovery), July 5 (Independence Day), Sept. 27-28 est. (Aid el-Fitr), Nov. 1 (Revolution Day), Dec. 3-4 est. (Aid el-Adha).

ARGENTINA—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 1-2 (Carnival), April 15 (Holy Thursday), April 16 (Holy Friday), May 1 (Labor Day), May 25 (Anniversary of 1810 Revolution), June 17 (Corpus Christi), June 20 (Flag Day), July 9 (Independence Day), Aug. 15 (Assumption), Aug. 17 (Death of General San Martin), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Regional holidays: Nov. 10 (Day of Tradition), Prov. of Buenos Aires; Nov. 11 (San Martin de Tours), City of Buenos Aires.

AUSTRALIA—Jan. 1 (New Year's Day), Jan. 26 (Australia Day), April 16-19 (Easter), April 25-26 (ANZAC Day), Dec. 25 (Christmas), Dec. 26-27 (Boxing Day).

Regional holidays: Feb. 9 (Regatta Day), Southern Tasmania; March 1 (Labor Day), Western Australia and Tasmania; March 8 (Labor Day), Victoria; May 6 (Labor Day), Queensland and Northern Territory; May 17 (Cup Day), South Australia: June 1 (Foundation Day), Western Australia and Northern Territory; June 7 (Queen's Birthday), New South Wales, Queensland, South Australia, Victoria, Tasmania and Australian Capital Territory; Aug. 2 (Bank Holiday), New South Wales and Australian Capital Territory; Aug. 11 (Exhibition Day), Queensland; Sept. 22 (Show Day), Perth Metropolitan area; Sept. 23 (Show Day), Melbourne Metropolitan area; Oct. 4 (Eight-Hour Day), New South Wales and Australian Capital Territory; Oct. 11 (Labor Day), South Australia; (Queen's Birthday), Western Australia; Nov. 2 (Melbourne Cup Day), Victoria.

AUSTRIA—Jan. 1 (New Year's), Jan. 6 (Epiphany), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 17 (Corpus Christi), June 7 (Whit Monday), Aug. 15 (Assumption), Oct. 26 (National Holiday), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas), Dec. 26 (St. Stephen's Day).

BAHAMAS—Jan. 1 (New Year's), April 16-19 (Easter), June 4 (Labor Day), June 7 (Whit Monday), July 10 (Independence Day), Aug. 2 (Emancipation Day), Oct. 12 (Discovery Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

BAHRAIN—Jan. 1 (New Year's), Jan. 3 (Hijra New Year's), Jan. 11-12 (Ashura), March 13 (Prophet's Birthday), Sept. 25-27 (Id-al-Fitr), Dec. 2-4 (Id-al-Adha), Dec. 16 (National Day).

BARBADOS—Jan. 1 (New Year's), April 16 (Good Friday), April 19 (Easter Bank Holiday), June 7 (Whit Monday), July 5 (Caribbean Day), Oct. 24 (U.N. Day), Nov 30 (Independence Day), Dec. 27 (Boxing Day).

BELGIUM—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), July 21 (Independence Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 2 (All Souls), Nov. 11 (Veterans' Day), Nov. 15 (Dynasty Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Regional holiday: July 11 (Flemish Holiday), Flanders.

BOLIVIA—Jan. 1 (New Year's), April 16 (Good Friday), May 1 (Labor Day), June 17 (Corpus Christi), Aug. 6 (Independence Day), Dec. 25 (Christmas).

Regional holidays: Feb. 10 (City of Oruro Day), April 15 (Tarija), May 25 (Sucre), July 16 (La Paz), Sept. 14 (Cochabamba), Sept. 24 (Santa Cruz, Cobija), Nov. 10 (Potosi), Nov. 18 (Trinidad).

BOTSWANA—Jan. 1 (New Year's), April 16-19 (Easter), May 27 (Ascension), May 31 (President's Day), June 7 (Whit Monday), June 8 (Commonwealth Day), Aug. 2 (First Monday in August), Sept. 30 (Botswana Day), Oct. 25 (U.N. Day), Dec. 25 (Christmas), Dec. 27 (Boxing Day).

BRAZIL—Jan. 1 (New Year's), March 1-2 (Carnival), April 16 (Good Friday), April 21 (Tiradentes), May 1 (Labor Day), Sept. 7 (Independence Day), Nov. 2 (All Souls), Nov. 15 (Proclamation of the Republic), Dec. 25 (Christmas).

Regional holidays: Jan. 20 (San Sebastian Day), Rio de Janeiro; Jan. 25 (Sao Paulo Anniversary), Sao Paulo; June 17 (Corpus Christi), Brasilia; Oct. 12 (N.S. Aparecida—Patron Saint Day), Brasilia; Dec. 8 (Immaculate Conception), Brasilia.

BULGARIA—Jan. 1 (New Year's), May 1-2 (May Day), May 24 (National Education Day), Sept. 9-10 (Liberation Day), Nov. 7 (Revolution Day).

The day preceding a Bulgarian holiday is generally a half work-day.

BURUNDI—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Pentecost), July 1 (Independence Day), Aug. 15 (Assumption), Sept. 18 (Victory of Uprona Party), Oct. 13 (Assassination of National Hero), Nov. 1 (All Saints), Nov. 28 (Republic Day), Dec. 25 (Christmas).

CANADA—Jan. 1 (New Year's), April 16-19 (Easter), May 24 (Victoria Day), July 1 (Dominion Day), Sept. 6 (Labor Day), Oct. 11 (Thanksgiving), Nov. 11 (Remembrance Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day—in Quebec businesses usually are open after 1 p.m.).

Holidays for Christmas and Boxing Day will be observed on Dec. 27 and 28.

Regional holiday: Aug. 2 (Civic Holiday), Ontario, Alberta, British Columbia, Manitoba.

CENTRAL AFRICAN REPUBLIC—Jan. 1 (New Year's), Feb. 22 (President Bokassa's Birthday), March 29 (Anniversary of President Boganda's death), May 1 (Labor & Mothers' Day), Dec. 1 (National Day), Dec. 25 (Christmas).

Some businesses observe the religious holidays of Easter Monday, Ascension, Pentecost, Assumption and All Saints Day as well.

CHAD—Jan. 1 (New Year's), April 13 (National Day), April 19 (Easter Monday), May 1 (Labor Day), April or May est. (Mouloud el Nebi), May 25 (African Continent Liberation Day), May 27 (Ascension), June 6-7 (Pentecost), Aug. 11 (Independence Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 28 (Proclamation of the Republic), Oct. est. (Aid el Kebir—end of Ramadan), Nov. est. (Aid el Sakhairr—Birth of Prophet), Dec. 25 (Christmas).

CHILE—Jan. 1 (New Year's), April 16 (Good Friday), April 17 (Easter Saturday), May 1 (Labor Day), May 21 (Battle of Iquique), Aug. 15 (Assumption), Sept. 18 (Independence Day), Sept. 19 (Day of the Armed Forces), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

CHINA, PEOPLE'S REPUBLIC—Jan. 1 (New Year's), Jan. 31-Feb. 2 (Spring Festival), May 1 (Labor Day), Oct. 1-2 (Founding of People's Republic).

COLOMBIA—Jan. 1 (New Year's), Jan. 6 (Epiphany), April 15 (Maundy Thursday), April 16 (Good Friday), May 1 (Labor Day), May 27 (Ascension), June 17 (Corpus Christi), June 29 (Sts. Peter and Paul), July 20 (Independence Day), Aug. 7 (Battle of Boyaca), Aug. 15 (Assumption), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Nov. 11 (Independence of Cartagena), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

COSTA RICA—Jan. 1 (New Year's), March 19 (St. Joseph's Day), April 11 (Juan Santamaria), April 15-18 (Easter), May 1 Labor Day), June 29 (Sts. Peter and Paul), July 25 (Annexation of Guanacaste), Aug. 2 (Feast of Our Lady of the Angels), Aug. 15 (Assumption), Sept. 15 (Independence), Oct. 12 (Columbus Day), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

CZECHOSLOVAKIA—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (May Day), May 9 (National Day), Dec. 25-26 (Christmas).

Regional holiday: Aug. 29, Slovakia.

DAHOMEY—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (May Day), May 27 (Ascension), June 7 (Pentecost), Aug. 1 (Independence Day), Aug. 15 (Assumption), Oct. 26 (Revolution Day), Nov. 1 (All Saints), Dec. 25 (Christmas).

The dates for El Kebir (Feast of the Sheep), and Id-el-Mulud are variable and unknown at this time.

The day following Revolution Day (Oct. 26) is usually declared a holiday as well.

DENMARK—Jan. 1 (New Year's), April 15-19 (Easter), May 14 (Prayer Day), May 27 (Ascension), June 5 (Constitution Day—half-day), June 7 (Whit Monday), Dec. 25-26 (Christmas).

May 1 (Labor Day), Dec. 24 and Dec. 31 are traditional half-day holidays. However, as on June 5, most businesses and banks are closed on those days.

DOMINICAN REPUBLIC — Jan. 1 (New Year's), Jan. 21 (Dia de Ntra. Sra. de la Altagracia), Jan. 26 (Dia de Duarte), Feb. 27 (Independence Day), April 16 (Good Friday), May 1 (Labor Day), June 17 (Corpus Christi), Aug. 16 (Restoration Day), Sept. 24 (Dia de Ntra. Sra. de las Mercedes).

ECUADOR—Jan. 1 (New Year's), April 16 (Good Friday), May 1 (Labor Day), May 24 (Battle of Pichincha), July 24 (Birth Date of Simon Bolivar), Aug. 10 (National Independence Day), Oct. 9 (Guayaquil Independence Day), Oct. 12 (Day of the Race), Nov. 2 (Day of the Deceased), Nov. 3 (Cuenca Independence Day), Dec. 6 (Foundation of Quito), Dec. 25 (Christmas).

EGYPT—Jan. 2 est. (Islamic New Year), Feb. 22 (Unity Day), March 8 (Syrian Revolution Day), March 13 est. (Moulid El Nabi), April 26 (Sham El Nassim), June 18 (Evacuation Day), July 23 (National Day), Sept. 24-27 est. (Ramadan Bairam), Oct. 6 (Armed Forces Day), Oct. 24 (Popular Resistance Day), Dec. 1-5 est. (Kurban Bairam), Dec. 22 (Islamic New Year), Dec. 23 (Victory Day).

EL SALVADOR—Jan. 1 (New Year's), April 15-18 (Holy Week), May 1 (Labor Day), Sept. 15 (Independence Day), Nov. 5 (First Cry of Independence), Dec. 24-Jan. 2 (Christmas Holidays).

ETHIOPIA—Jan. 7 (Ethiopian Christmas), Jan. 20 (Ethiopian Epiphany), March 2 (Victory of Adwa Commemoration Day), March 13 (Birthday of the Prophet Mohammed), April 6 (Patriots Victory Day), April 23 (Ethiopian Good Friday), May 1 (Labor Day), Sept. 11 (Ethiopian New Year and Eritrean Reunion with Her Motherland), Sept. 27 (Finding of the True Cross), Oct. 5-6 (Id Al Fater—Ramadan), Dec. 13 (Id Al Adha—Arefa).

FINLAND—Jan. 1 (New Year's), April 16-19 (Easter), May 1 (Labor Day), June 25 (Midsummer's Eve), Dec. 6 (Independence Day), Dec. 24-26 (Christmas).

FRANCE—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), July 14 (Bastille Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 11 (Veterans Day), Dec. 25 (Christmas).

August is regarded in France as a very poor month for conducting business, as most firms are closed for vacation.

GABON—Jan. 1 (New Year's), March 12 (Renovation Day), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Pentecost), Aug. 15 (Assumption), Aug. 17 (Independence Day), Nov. 1 (All Saints), Dec. 25 (Christmas).

Often very little work is done on the day preceding and following a holiday; this is particularly true of Renovation and Independence Days.

GAMBIA—Jan. 1 (New Year's), Feb. 18 (National Day), April est. (Maulud el-Nabi), April 16-19 (Easter), Aug. 15 (Assumption), Oct. est. (Id-el-Fitr), Dec. est. (Id-el-Kabir), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

GERMAN DEMOCRATIC REPUBLIC—Jan. 1-2 (New Year's), April 16 (Good Friday), May 1 (May Day), June 7 (Whit Monday), Oct. 7-8 (Republic Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

GERMANY, FEDERAL REPUBLIC OF, AND WEST BERLIN—Jan. 1 (New Year's), April 16-19 (Easter), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), June 17 (Day of German Unity), Nov. 17 (Repentance Day), Dec. 24 (Christmas Eve afternoon), Dec. 25-26 (Christmas).

Regional holidays: Jan. 6 (Epiphany), Baden-Wuerttemberg and Bavaria; March 1 (Rose Monday), Bonn, Cologne, Duesseldorf, Mainz, and other Catholic areas celebrating Carnival; Aug. 15 (Assumption), Saarland, Catholic areas of Bavaria; Nov. 1 (All Saints), North Rhine-Westphalia, Baden-Wuerttemberg, Rhineland-Palatinate, Saarland, Catholic areas of Bavaria.

GHANA—Jan. 1 (New Year's), Jan. 13 (National Redemption Day), March 6 (Independence Day), April 16-19 (Easter), July 1 (Republic Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

GREECE—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 8 (Kathara Deftera), March 25 (Independence Day), April 23-26 (Easter), May 1 (May Day), June 14 (Whit Monday), Aug. 15 (Assumption), Sept. 14 (half-day for shops—Holy Cross Day), Oct. 27 (half-day for government services—Oxi Day Eve), Oct. 28 (Oxi Day), Dec. 24 (half-day except for shops—Christmas Eve), Dec. 25 (Christmas), Dec. 26 (Boxing Day), Dec. 31 (half-day except for shops—New Year's Eve).

Regional holidays: March 7 (Accession Day), Dodecanese Islands; Oct. 4 (Liberation of Xanthi), Xanthi; Oct. 26 (St. Demetrius Day), Thessaloniki; Nov. 30 (St. Andreas' Day), Patras.

GUATEMALA—Jan. 1 (New Year's), April 15-18 (Easter week), May 1 (Labor Day), May 10 (Mothers' Day), June 30 (Army Day), Aug. 15 (Assumption), Sept. 15 (Independence Day), Oct. 20 (Revolution Day), Nov. 1 (All Saints), Dec. 24 afternoon (Christmas Eve), Dec. 25 (Christmas), Dec. 31 afternoon (New Year's Eve).

Banks will be closed April 14 afternoon, May 3, July 1, Aug. 16 and Oct. 12.

GUYANA—Jan. 1 (New Year's), Feb. 23 (Republic Day), April 16 (Good Friday), April 19 (Easter Monday), May 1 (Labor Day), July 5 (Caricom Day), Aug. 2 (Commonwealth Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Dates for Eid-ur-Ahza, Phagwah, Youman Naubi and Deepavali depend on sighting of moon and are unknown now.

HAITI—Jan. 1 (New Year's and Independence Day), Jan. 2 (Ancestors' Day), March 1 (Lundi Gras—afternoon), March 2 (Mardi Gras), April 16 (Good Friday), May 1 (Labor and Agriculture Day), May 18 (Flag and University Day), May 27 (Ascension), June 17 (Corpus Christi), Oct. 17 (Dessalines' Death), Oct. 24 (U.N. Day), Nov. 1 (All Saints), Nov. 2 (All Souls), Nov. 18 (Armed Forces and Veterans Day), Dec. 5 (Anniversary of Discovery of Haiti), Dec. 25 (Christmas).

HONDURAS—Jan. 1 (New Year's), April 14 (Day of the Americas), April 15 (Holy Thursday), April 16 (Good Friday), May 1 (Labor Day), Sept. 15 (Proclamation of Independence in Central America), Oct. 3-4 (Birthday of General Francisco Morazan), Oct. 12 (Discovery of America), Oct. 21 (Armed Forces Day), Dec. 25 (Christmas).

HONG KONG—Jan. 1 (1st week-day in Jan.), Jan. 31 (National Holiday), Feb.

HOLIDAY TIME IN JAPAN—*Tokyo's Odakyu store is busy at New Year's season.*

2-5 (Lunar New Year), April 16-19 (Good Friday to Easter Monday), April 21 (Queen's Birthday), June 2 (Dragon Boat Festival), July 1 (1st week-day in July), Aug. 2 (Liberation Day), Aug. 30 (National Holiday), Sept. 9 (2nd Day following Mid-Autumn Festival), Nov. 1 (National Holiday), Dec. 25 (Christmas), Dec. 27 (1st week-day after Christmas).

HUNGARY—Jan. 1 (New Year's), April 4 (Liberation Day), April 19 (Easter Monday), May 1 (Labor Day), Aug. 20 (Constitution Day), Nov. 7 (Anniversary of the October Revolution), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

ICELAND—Jan. 1 (New Year's), April 15-19 (Maundy Thursday to Easter Monday), April 22 (First Day of Summer), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), June 17 (Independence Day), Aug. 2 (Bank Holiday), Dec. 24 (Christmas Eve afternoon), Dec. 25 (Christmas), Dec. 26 (Boxing Day), Dec. 31 (New Year's Eve afternoon).

INDIA—Jan. 14 (Muharram), Jan. 26 (Republic Day), March 16 (Holi), April 9 (Ramanavami), April 16 (Good Friday), May 13 (Buddha Purniama), Aug. 15 (Independence Day), Aug. 18 (Janmastami), Sept. 26 (Id-ul-Fitr), Oct. 1-2 (Dussehra), Oct. 2 (Mahatma Gandhi's Birthday), Oct. 22 (Diwali), Nov. 6 (Guru Nanak's Birthday), Dec. 3 (Id-ul-Zuha), Dec. 25 (Christmas).

INDONESIA—Jan. 1 (New Year's), Jan. 3 (1 Muharram 1396), March 13 (Mohammad's Birthday), April 16 (Good Friday), May 27 (Ascension of Jesus Christ), July 25 (Ascension of Mohammad), Aug. 17 (Independence Day), Sept. 25-26 (Idul Fithri—end of Ramadan fasting month), Dec. 2 (Idul Adha), Dec. 22 (1 Muharram 1397), Dec. 25 (Christmas).

IRAN—Jan. 12 (Ashura—10th day after Moharram), Feb. 29 (Deaths of the Prophet & Imam Hassan), March 18 (Birthdays of the Prophet & Iman Jaafar Sadegh), March 21-22 (No-Ruz—Iranian New Year), April 2 (Sizdah—13th day of New Year), July 25 (Mabas), Aug. 5 (Constitution Day), Aug. 12 (Birthday of the 12th Imam), Sept. 16 (Death of Imam Ali), Sept. 26 (Id-e-Fetr—1st day after Ramazan), Oct. 20 (Death of Imam Jaafar Sadegh), Oct. 26 (Birthday of the Shah), Nov. 4 (Birthday of Imam Reza), Dec. 2 (Id-e-Ghorban—Feast of Sacrifice), Dec. 10 (Ide-e-Ghadir).

The business and government office weekend in Tehran is Thursday and Friday. Many U.S. Government offices observe a Friday-Saturday weekend.

Both government and private sector officials are generally unavailable beginning the week prior to No-Ruz (March 21) and continuing through Sizdah (April 2).

IRAQ—Jan. 1 (New Year's), Jan. 3 est. (Islamic New Year's), Jan. 6 (Army Day), Jan. 14 est. (Ashura Day—Moharram), Feb. 8 (1963 "14th Day of Ramadan" Revolution), March 13 est. (Prophet Mohammed's Birthday), March 21 (Kurdish New Year's), May 1 (Labor Day), July 14 (1958 Revolution), July 17 (1968 Revolution), Sept. 25-27 est. (Id-al-Fitr), Dec. 4-7 est. (Id-al-Adha).

Every Friday is the official weekly day of rest for all Iraqi Government and private business organizations. Sunday is a normal workday in Iraq.

IRELAND—Jan. 1 (New Year's), March 17 (St. Patrick's Day), April 16 (Good Friday), April 19 (Easter Monday), June 7 (Bank Holiday), Aug. 2 (Bank Holiday), Dec. 25 (Christmas), Dec. 26 (St. Stephen's).

ISRAEL—April 15 (Passover, first day), April 22 (Passover, last day), May 5 (Independence Day), June 4 (Pentecost), Sept. 25-26 (Rosh Hashana—New Year), Oct. 4 (Yom Kippur—Day of Atonement), Oct. 9 (First Day of Tabernacles), Oct. 16 (Last Day of Tabernacles).

On Fridays, and days preceding holidays, businesses close at 1 p.m. Sundays are working days in Israel and on Saturdays all businesses are closed.

Banks are closed on March 16 (Purim) and Aug. 5 (Commemoration of the Temple).

Between the first and last day of Passover and Tabernacles, some businesses and institutions close half days. A few factories take annual leave; others remain open.

ITALY—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 19 (St. Joseph), April 18 (Easter), April 19 (Easter Monday), April 25 (Anniversary of the Liberation of Italy), May 1 (Labor Day), May 27 (Ascension), June 2 (Proclamation of the Italian Republic), June 17 (Corpus Christi), June 29 (Sts. Peter and Paul), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 4 (Unity Day), Dec. 7 (St. Ambrogio—Milan's Patron Saint), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas), Dec. 26 (St. Stephen's Day).

August is generally a poor month for conducting business in Italy, since most business firms are closed for vacations.

IVORY COAST—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Pentecost), Aug. 15 (Assumption), Sept. 25-27 est. (Id-el-Fitr), Nov. 1 (All Saints), Dec. 2-3 est. (Tabaski), Dec. 7 (Independence Day), Dec. 25 (Christmas).

JAMAICA—Jan. 1 (New Year's), March 3 (Ash Wednesday), April 16-19 (Easter), May 24 (Labor Day), Aug. 2 (Independence Day), Oct. 18 (Heroes Day), Dec. 25 (Christmas), Dec. 27 (Boxing Day).

JAPAN—Jan. 1 (New Year's), Jan. 15 (Adult's Day), Feb. 11 (National Foundation Day), March 20 (Vernal Equinox Day), April 29 (Emperor's Birthday), May 3 (Constitution Day), May 5 (Children's Day), Sept. 15 (Respect for the Aged Day), Sept. 23 (Autumnal Equinox Day), Oct. 11 (Sports Day), Nov. 3 (Culture Day), Nov. 23 (Labor Thanksgiving Day).

KENYA—Jan. 1 (New Year's), April 16 (Good Friday), April 19 (Easter Monday), May 1 (Labor Day), June 1 (Madaraka Day), Sept. 29 est. (Id-ul-Fitr), Oct. 20 (Kenyatta Day), Dec. 13 (Independence Day), Dec. 25 (Christmas), Dec. 27 (Boxing Day).

KOREA—Jan. 1-3 (New Year's), March 1 (Independence Day), April 5 (Arbor Day), May 5 (Children's Day), May 6 (Buddha's Birthday), June 6 (Memorial Day), July 17 (Constitution Day), Aug. 15 (Independence Day), Sept. 8 (Thanksgiving Day), Oct. 3 (National Foundation Day), Oct. 9 (Anniversary of Proclamation of Korean Alphabet Day), Oct. 24 (U.N. Day), Dec. 25 (Christmas).

March 10 (Labor Day) companies with labor unions will be closed but most government and public offices open. Oct. 1 (Armed Forces Day) is not an official holiday but high-level government officials not available for appointments.

Saturday is a normal workday for government and business.

KUWAIT—Jan. 3 est. (Islamic New Year's), Feb. 25 (National Day), March 13 est. (Birth of the Prophet), July 24 est. (Ascension), Sept. 25-27 est. (Id-al-Fitr), Dec. 1 est. (Waqfat Arafat), Dec. 2-5 est. (Id-al-Adha).

LEBANON—Jan. 1 (New Year's), Jan. 2 est. (Moslem New Year's), Jan. 12 est. (Ashura), Feb. 9 (St. Maron's Day), March 14 est. (Prophet's Birthday), March 22 (Arab League Day), April 16 (Good Friday), April 19 (Easter Monday), May 1 (Labor Day), May 6 (Martyr's Day), May 27 (Ascension), Aug. 15 (Assumption), Sept. 25 est. (Feast of Ramadan), Nov. 1 (All Saints), Nov. 22 (Independence Day), Dec. 2 (Feast of Al-Adha), Dec. 25 (Christmas).

LESOTHO—Jan. 1 (New Year's), March 12 (Moshoeshoe's Day), March 22 (National Tree Planting Day), April 18-19 (Easter), May 2 (King's Birthday), May 24 (Commonwealth Day), May 27 (Ascension), July 2 (Family Day), Oct. 1 (National Sports Day), Oct. 4 (Independence Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

LIBERIA—Jan. 1 (New Year's), Jan. 7 (Pioneers' Day), Feb. 11 (Armed Forces Day), March 12 (Decoration Day), March 15 (J. J. Roberts' Birthday), April 11 (Fast and Prayer Day), May 14 (Unification Day), May 25 (African Liberation Day), July 26 (Independence Day), Aug. 24 (Flag Day), Nov. 25 (Thanksgiving Day), Nov. 29 (President William V. S. Tubman's Birthday), Dec. 1 (Matilda Newport Day), Dec. 25 (Christmas).

LUXEMBOURG—Jan. 1 (New Year's), March 1 (Shrove Monday), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), June 23 (Grand Duke's Birthday), Aug. 15 (Assumption), Sept. 6 (Fall Fair "Schobermess"), Nov. 1 (All Saints), Nov. 2 (All Souls), Dec. 25-26 (Christmas).

MALAWI—Jan. 1 (New Year's), March 3 (Martyr's Day), April 16-19 (Easter), May 14 (Kamuzu Day), July 5-7 (Republic Celebrations), Aug. 2 (Bank Holiday), Oct. 17-18 (Mothers' Day), Dec. 25 (Christmas), Dec. 26-27 (Boxing Day).

MALAYSIA—Jan. 1 (New Year's), Feb. 2-3 (Chinese New Year), Feb. 3 (Federal Territory Day), May 13 (Wesak Day), June 2 (Birthday of Yang Dipertuan Agong), Aug. 31 (National Day), Sept. 27-28 (Hari Raya Puasa), Oct. 22 (Deepavali), Dec. 2 (Hari Raya Haji), Dec. 25 (Christmas).

MALI—Jan. 1 (New Year's), Jan. 20 (Holiday of National Army), April 18 (Easter), May 1 (Labor Day), May 25 (Day of Africa), Sept. 22 (Independence Day), Nov. 19 (Liberation Day), Dec. 25 (Christmas).

In addition, the following Muslim holidays, subject to lunar variations, are observed: Two days of Mawloud (Birth and Baptism), Day of Ramadan and Tabaski.

MALTA—Jan. 1 (New Year's), Feb. 10 (St. Paul's Shipwreck), March 19 (St. Joseph), April 16 (Good Friday), May 1 (May Day), May 27 (Ascension), June 17 (Corpus Christi), June 29 (Sts. Peter and Paul), Aug. 15 (Assumption), Sept. 8 (Commemoration of Two Sieges and Regatta Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 13 (National Day), Dec. 25 (Christmas).

MEXICO—Jan. 1 (New Year's), Feb. 5 (Anniversary of Constitution), March 21 (Juarez' Birthday), April 16 (Good Friday), May 1 (Labor Day), May 5 (Anniversary of Battle of Puebla), Sept. 16 (Anniversary of Proclamation of Independence), Oct. 12 (Race Day and Columbus Day), Nov. 2 (All Souls), Nov. 20 (Anniversary of Revolution), Dec. 25 (Christmas).

MOROCCO—Jan. 1 (New Year's), Jan. 3 est. (Moslem New Year), March 3 (Throne Day), March 14 est. (Mouloud), May 1 (Labor Day), Sept. 25 est. (Aid El Fitr), Nov. 18 (Independence Day), Dec. 3 est. (Aid el Kebir).

During the Moslem month of Ramadan, approximately Aug. 26-Sept. 25 in 1976, banks are open from 9:30 a.m. to 2 p.m. and government offices 9 a.m. to 2 p.m.

Some private firms (excluding banks and insurance companies) and persons of the Christian and Jewish faith, observe the following religious holidays: April 14 (Passover). April 19 (Easter Monday), May 27 (Ascension), June 7 (Whit Monday), Aug. 15 (Assumption), Sept. 25 (Rosh Hashana), Oct. 4 (Yom Kippur), Nov. 1 (All Saints), Dec. 25 (Christmas).

MOZAMBIQUE—Jan. 1 (New Year's), June 25 (Independence Day), July 24 (Lourenco Marques City Day), Aug. 20 (Beira City Day), Sept. 25 (Frelimo and FPLM Day), Dec. 25 (Christmas).

NEPAL—Jan. 11 (Prithvi Jayanti), Jan. 30 half-day (Martyr's Day), Feb. 5 (Basanta Panchami), Feb. 19 (Tribhuvan Jayanti & Democracy Day), March 15 (Fagu), April 8 (Chaitra Ashtami), April 13 (New Year's), May 13 (Buddha Jayanti), Aug. 9 (Janai Purnima), Aug. 17 (Krishna Jayanti), Sept. 7 (Indra Jatra), Sept. 24 (Ghatasthapana), Sept. 30-Oct. 7 (Dasain Festival), Oct. 22-24 (Tihar Festival), Dec. 15 (Mahendra Jayanti & Constitution Day), Dec. 29 (King Birendra's Birthday).

March 8 (Women's Day), Aug. 29 (Rishi Panchami) and Nov. 8 (Queen Aishwarya's Birthday) are holidays for women only.

Regional holidays: March 30 (Ghode Jatra) and Aug. 10 (Gai Jatra), Kathmandu Valley only.

All dates after April 13 are tentative.

NETHERLANDS — Jan. 1 (New Year's), April 16-19 (Good Friday through Easter Monday), April 30 (Queen's Birthday), May 27 (Ascension), June 7 (Whit Monday), Dec. 25-26 (Christmas).

NEW ZEALAND—Jan. 1 (New Year's), Feb. 6 (New Zealand Day), April 16 (Good Friday), April 19 (Easter Monday), April 25 (ANZAC Day), June 7 (Queen's Birthday), Oct. 25 (Labor Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Regional holidays: Jan. 22, Wellington; Jan. 29, Auckland; Feb. 1, Nelson; Feb. 6, Northland; March 23, Otago; Nov. 1, Hawks Bay, Marlboro; Dec. 1, Westland; Dec. 16, Christchurch.

Many regional holidays are observed on the following or preceding Monday.

NICARAGUA—Jan. 1 (New Year's), April 15 (Holy Thursday), April 16 (Good Friday), May 1 (Labor Day), July 14 (Day of National Dignity), Sept. 14 (Battle of San Jacinto), Sept. 15 (Independence Day), Oct. 12 (Columbus Day), Dec. 25 (Christmas).

During Holy Week (April 12-17) most businesses are closed, and Dec. 24-Jan. 6 most government offices are closed.

Unofficial but generally observed holidays are May 27 (Army Day) and Nov. 2 afternoon (All Souls).

Regional holidays: Aug. 1 and Aug. 10 are Managua local holidays (Patron Saint) from noon on.

NIGER—Jan. 1 (New Year's), last week in March est. (Mouloud), April 15 (Anniversary of SMC), April 19 (Easter Monday), May 1 (Labor Day), Aug. 3 (Independence Day), first week in Oct. est. (Korite), second week in Dec. est. (Tabaski), Dec. 18 (Republic Day), Dec. 25 (Christmas).

NIGERIA—Jan. 1 (New Year's), March 13 est. (Id-el-Maulud), April 16 (Good Friday), April 19 (Easter Monday), Oct. 1 (National Day), Sept. 25-27 est. (Id-el-Fitr), Dec. 2-3 est. (Id-el-Kabir), Dec. 25 (Christmas), Dec. 27 (Boxing Day).

NORWAY—Jan. 1 (New Year's), April 15-19 (Holy Thursday through Easter Monday), May 1 (Labor Day), May 17 (Norwegian Constitution Day), June 7 (Whit Monday), Dec. 25-26 (Christmas).

OMAN—Jan. 3 est. (Islamic New Year), March 15 est. (Birth of the Prophet), July 26 est. (Ascension of the Prophet), Sept. 25-27 est. (Eid-al-Fitr), Nov. 18-19 (National Day), Dec. 2-5 est. (Eid-al-Adha).

Most firms are closed on Fridays.

Since there are relatively large minority communities in Oman, some businesses observe dates not officially recognized as holidays.

PAKISTAN—Jan. 12 est. (Muharram), March 15 est. (Eid-I-Milad-Un-Nabi), March 23 (Pakistan Day), May 1 (May Day), July 1 (Bank Holiday), Aug. 14 (Independence Day), Sept. 6 (Defense Day), Sept. 11 (Death Anniversary of Quaid-I-Azam), Sept. 24 (Jumatulwide), Sept. 26-27 (Eid-ul-Fitr), Nov. 9 (Birthday of Allama Iqbal), Dec. 2-3 est. (Eid-ul-Azhazal), Dec. 25 (Birthday of Quaid-I-Azam and Christmas), Dec. 31 (Bank Holiday).

PANAMA—Jan. 1 (New Year's), Jan. 9 (Day of Mourning), March 2 (Mardi Gras), April 16 (Good Friday), May 1 (Labor Day), Oct. 11 (Revolution Day), Nov. 3 (Independence from Colombia), Nov. 27-28 (Independence from Spain), Dec. 8 (Mothers' Day), Dec. 25 (Christmas).

Most stores and offices close from Feb. 28-March 2, Mardi Gras Day.

Regional holidays: Aug. 15-16 (Panama City Anniversary), Panama City; Nov. 5 (City of Colon Day), City of Colon.

PARAGUAY—Jan. 1 (New Year's), Feb. 3 (St. Blas Day), March 1 (Heroes Day), April 15 (Maundy Thursday), April 16 (Good Friday), May 1 (Labor Day), May 14-15 (Independence Day), June 12 (Armistice Day), June 17 (Corpus Christi Day), Aug. 15 (Founding of City of Asuncion), Aug. 25 (Constitution Day), Sept. 29 (Victory of Boqueron Day), Oct. 12 (Columbus Day), Nov. 1 (All Saints Day). Dec. 8 (Virgin of Caacupe Day), Dec. 25 (Christmas).

PERU—Jan. 1 (New Year's), April 15 afternoon (Holy Thursday), April 16 (Good Friday). May 1 (Labor Day), June 24 afternoon (Agricultural Day), June 29 (Sts. Peter and Paul), July 28-29 (Independence Day), Aug. 30 (Santa Rosa de Lima), Oct. 9 (National Day of Dignity), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

PHILIPPINES—Jan. 1 (New Year's), April 9 (Bataan Day), April 15 (Holy Thursday), April 16 (Good Friday), May 1 (Labor Day), June 12 (Independence Day), July 4 (Philippine-American Friendship Day), Nov. 30 (Bonifacio Day), Dec. 25 (Christmas), Dec. 30 (Rizal Day).

Regional holiday: June 24 (Manila Day), Manila only.

POLAND—Jan. 1 (New Year's), April 19 (Easter Monday), May 1 (Workers' Day), June 17 (Corpus Christi), July 22 (National Day), Nov. 1 (All Saints), Dec. 25 (Christmas).

PORTUGAL—Jan. 1 (New Year's), March 2 (Carnival), April 16 (Good Friday), April 25 (Revolution Day), May 1 (Labor Day), June 10 (Portugal Day), June 17 (Corpus Christi), Aug. 15 (Assumption), Oct. 5 (Proclamation of Republic), Nov. 1 (All Saints), Dec. 1 (Restoration of Independence), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Regional holiday: June 13 (St. Antonio Day), Lisbon only.

FESTIVE MEXICANS—*Alamedo Central in Mexico City is crowded on holidays.*

ROMANIA—Jan. 1-2 (New Year's), May 1-2 (Labor Day), Aug. 23-24 (National Day).

SAUDI ARABIA—Sept. 24-30 est. (Id-al-Fitr—End of Ramadan Fast), Dec. 1-5 est. (Id-al-Adha—End of Pilgrimage Month).

The Saudi Arabian weekend consists of Thursday and Friday. Business, however, can generally be conducted on Thursdays except during the month of Ramadan, the fasting season.

Ramadan in 1976 will begin about Aug. 27-28 and end about Sept. 24-25. Business is slow during the day but can pick up in the evening. U.S. businessmen could plan visits during the period but should be ready to work nights.

The Pilgrimage or Haj season, which will begin about Nov. 2 in 1976, witnesses the influx of about 2 million pilgrims to the Jidda area. All Saudi businesses are preoccupied with services to the pilgrims, hotels are fully booked and transport facilities are generally overloaded. The Saudi Government usually restricts visa issuance during this period.

SENEGAL—Jan. 1 (New Year's), March 14 est. (Mawloud), April 4 (Independence Day), April 19 (Easter Monday), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), Aug. 15 (Assumption), Sept. 26 est. (Korite), Nov. 1 (All Saints), Dec. 3 est. (Tabaski), Dec. 25 (Christmas).

SIERRA LEONE—Jan. 1 (New Year's), April 16-19 (Easter), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Dates for Moulid-un-Nabi, Eid-ul-Fitr and Eid-ul-Adha are unknown at this time.

SINGAPORE—Jan. 1 (New Year's), Jan. 31-Feb. 2 (Chinese New Year), April 16 (Good Friday), May 1 (Labor Day), May 13 (Vesak Day), Aug. 9 (National Day), Sept. 25 est. (Hari Raya Puasa), Oct. 22 est. (Deepavali), Dec. 2 est. (Hari Raya Haji), Dec. 25 (Christmas).

SOUTH AFRICA—Jan. 1 (New Year's), April 16 (Good Friday), April 19 (Easter

Monday), May 27 (Ascension), May 31 (Republic Day), Sept. 6 (Settlers' Day), Oct. 10-11 (Kruger Day), Dec. 16 (Day of the Covenant), Dec. 25 (Christmas), Dec. 26-27 (Boxing Day).

SPAIN—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 19 (St. Joseph's), April 15 (Holy Thursday), April 16 (Good Friday), May 1 (Labor Day), May 27 (Ascension), June 17 (Corpus Christi), July 18 (National Uprising), July 25 (Santiago Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Regional Holidays: April 19 (Easter Monday), Barcelona; May 15 (San Isidro), Madrid; June 19 (Liberation Day), Bilbao; June 24 (St. John the Baptist), Barcelona; July 31 (St. Ignatius), Bilbao; Sept. 24 (Our Lady of Mercy), Barcelona; Oct. 1 (Day of the Caudillo), government offices.

SRI LANKA (formerly Ceylon)—Jan. 15 (Tamil Thai Pongal Day), Jan. 16 (Full Moon Poya Day), March 15 (Poya), April 12-13 (Sinhala and Tamil New Year's), April 14 (Poya), April 16 (Good Friday), May 13-14 (Wesak), June 11 (Poya), Aug. 9 (Poya), Sept. 1 (Poya), Oct. 7 (Poya), Oct. 22 (Deepavali), Dec. 2 (Hajj), Dec. 6 (Poya).

June 30 and Dec. 31 are special bank holidays.

SUDAN—Jan. 1 (Independence Day), Jan. 2 est. (New Year), March 3 (Southern Accord Anniversary), March 13 est. (Muhammed's Birthday), April 18 (Easter), April 26 est. (Sham al-Naseem), May 25 (Anniversary May Revolution), Sept. 24-27 est. (Ramadan Bairam), Oct. 12 (Inauguration Day), Nov. 30-Dec. 4 est. (Kurban Bairam), Dec. 25 (Christmas).

SURINAM—Jan. 1 (New Year's), March 16 (Holi Phagwa), April 16-19 (Good Friday to Easter Monday), May 1 (Labor Day), July 1 (Emancipation Day), Oct. 10 est. (Id-Ul-Fitr), Nov. 25 (Independence Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

SWEDEN—Jan. 1 (New Year's), Jan. 6 (Epiphany), April 16-19 (Easter), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), June 25-26 (Midsummer Day), Nov. 1 (All Saints), Dec. 24-26 (Christmas).

Government and commercial institutions, banks and offices will close early on Jan. 5, April 15, April 30, May 26, June 24, Nov. 5, Dec. 23 and Dec. 31.

SWITZERLAND—Jan. 1 (New Year's), Jan. 2 (Baerzelistag), April 16-19 (Easter), May 27 (Ascension), June 7 (Whit Monday), Aug. 1 (National Day), Dec. 24 half day (Christmas Ave), Dec. 25 (Christmas), Dec. 26 (St. Stephen's Day).

Regional holidays: More than 30 other holidays are observed locally, of which the following are noteworthy for major business centers: March 8-10 (Carnival), Basel; April 26 (Sechselauten), Zurich; May 1 afternoon (Labor Day), major cities; Sept. 2 (Thanksgiving), Geneva; Sept. 13 (Knabenschiessen), Zurich; Dec. 31 (Restoration Day), Geneva.

TAIWAN—Jan. 1 (New Year's and Commemoration Day of the Republic of China), Jan. 2 (additional New Year's holiday), Jan. 30-Feb. 1 (Chinese New Year's), March 29 (Youth Day and Chinese Martyrs' Day), April 4 (National Festival of the Sweeping of the Tombs), June 2 (Dragon Boat Festival), Sept. 8 (Moon Festival), Sept. 28 (Birthday of Confucius and Teachers' Day), Oct. 10-11 (Double Ten Day), Oct. 25 (Restoration Day), Oct. 31 (Birthday of President Chiang Kai-shek), Nov. 12 (Birthday of Dr. Sun Yat-sen), Dec. 25 (Constitution Day).

TANZANIA—Jan. 12 (Zanzibar Revolution Day), Feb. 5 (Birthday of Zanzibar Afro Shirazi Party), March 15 est. (Maulid Day), April 16-19 (Easter), April 26 (Union Day), May 1 (International Workers' Day), July 7 (Saba Saba Day), Sept. 26-27 est. (Idd-el-Fitr), Dec. 3 est. (Idd-el-Haj), Dec. 9 (Independence Day), Dec. 25 (Christmas).

THAILAND—Jan. 1 (New Year's), Jan. 31 (Chinese New Year's Day), Feb. 15 (Makha Bucha Day), April 6 (Chakri Day), April 13 (Songkran Day), May 1 (Labor Day), May 5 (Coronation Day), May 13 (Wisakha Bucha Day), Aug. 12 (Queen's Birthday), Oct. 23 (Chulalongkorn Day), Dec. 5 (King's Birthday), Dec. 10 (Constitution Day), Dec. 25 (Christmas), Dec. 31 (New Year's Eve).

TOGO—Jan. 1 (New Year's), Jan. 13 (National Liberation Day), April 19 (Easter Monday), April 27 (Independence Day), May 1 (Labor Day), May 27 (Ascension), June 7 (Whit Monday), Aug. 15 (Feast of Assumption), Nov. 1 (All Saints), Dec. 25 (Christmas).

TUNISIA—Jan. 1 (New Year's), Jan. 2 (Ras el am el Hijri), Jan. 18 (Remembrance Day), March 13 (Mouled), March 20 (Independence Day), April 9 (Martyr's Day), May 1 (Labor Day), June 1-2 (Victory Day), July 25 (Republic Day), Aug. 3 (President's Birthday), Aug. 13 (Women's Day), Sept. 3 (Commemoration of Sept. 3, 1934), Sept. 25 (Aid Seghir), Oct. 15 (Evacuation of Bizerte), Dec. 1 (Aid-el-Kebir).

Dates for the Moslem religious holidays shown are fixed for 1976, unlike dates in most Moslem countries which depend on sighting of the moon.

TURKEY—Jan. 1 (New Year's), April 22 afternoon and 23 (National Sovereignty and Children's Day), May 19 (Youth and Sports Day), May 26 afternoon and 27 (Freedom and Constitution Day), Aug. 30 (Victory Day), Sept. 24 afternoon and 27 (Feast of Sugar), Oct. 28 afternoon and 29 (Independence Day), Dec. 1 afternoon and Dec. 2-3 (Feast of Sacrifice), Dec. 31 afternoon (New Year's Eve).

UNITED ARAB EMIRATES—Jan. 1 (New Year's), Jan. 3 est. (Islamic New Year), March 13 est. (Birthday of the Prophet), July 24 est. (Ascension), Sept. 25-27 est. (Eid-al-Fitr), Dec. 1 est. (Waqfat Arafat), Dec. 2 (National Day), Dec. 2-5 est. (Eid-al-Adha).

UNITED KINGDOM—Jan. 1 (New Year's), April 18 (Easter), May 31 (Spring Bank Holiday), Dec. 25 (Christmas), Dec. 26-27 (Boxing Day).

Regional holidays: Jan. 2 (Bank Holiday), Scotland; March 17 (St. Patrick's Day), N. Ireland; April 16 (Good Friday), U.K., excluding N. Ireland; April 19 (Easter Monday), U.K., excluding Scotland; April 20 (day following Easter Monday), N. Ireland; May 3 (Bank Holiday), Scotland; May 9 (Liberation Day), Channel Islands; July 12 (Bank Holiday), N. Ireland; July 13 ("Declared Holiday"), most of N. Ireland; Aug. 2 (Bank Holiday), Scotland; Aug. 30 (Summer Bank Holiday), U.K., excluding Scotland.

URUGUAY—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 1-2 (Carnival—some businesses may close for 10-day period from Monday through following Thursday noon). April 15-16 (Holy Week—some businesses may close for 10-day period from Monday through following Thursday noon), April 19 (Arrival of 33 Orientales), May 1 (Labor Day), May 18 (Battle of Las Piedras), June 19 (Artigas' Birthday), July 18 (Constitution Day), Aug. 25 (Independence Day), Oct. 12 (Columbus Day), Nov. 2 (All Souls), Dec. 8 (Day of the Beaches), Dec. 25 (Christmas).

USSR—Jan. 1 (New Year's), March 8 (Women's Day), May 1-2 (May Day), May 9 (Victory Day), Nov. 7-8 (October Revolution), Dec. 5 (Constitution Day).

VENEZUELA—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 1 (Carnival), March 19 (St. Joseph's Day), April 15-18 (Easter), April 19 (Declaration of Independence), May 1 (Labor Day), May 27 (Ascension), June 17 (Corpus Christi), June 24 (Battle of Carabobo), June 29 (Sts. Peter and Paul), July 5 (Independence Day), July 24 (Bolivar's Birthday), Aug. 15 (Assumption), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 24 afternoon (Christmas Eve), Dec. 25 (Christmas), Dec. 31 afternoon (New Year's Eve).

Regional holidays: Feb. 3 (Sucre's Birthday), Cumana; March 10 (Vargas' Day), La Guaira; Oct. 24 (Urdaneta's Birthday), Maracaibo: Nov. 18 (Virgin of Chiquinquira), Maracaibo.

Religious holidays falling on Tuesday-Friday will be observed on the following Monday by banks.

YEMEN—Jan. 2 est. (Moslem New Year), March 9 est. (Prophet's Birthday), June 13 (Anniversary of 1974 Corrective Movement). Sept. 23 est. (Id-al-Fitr), Sept. 26-28 (Revolution Day), Oct. 14 (South Yemen's Independence Day), Nov. 30-Dec. 2 est. (Id-al-Adha).

During the period of Ramadan, approximately Aug. 24-Sept. 23 in 1976, government offices will be open 10 a.m.-2 p.m. only; businesses will generally be open, although many prominent firms give all their employees a two-week holiday at this time.

Normal work-week is Saturday-Tuesday; most businesses are open from 9 a.m.-1 p.m. and 4-7 p.m. The American Embassy is open Saturday-Wednesday, 8 a.m.-1 p.m. and 2:30-5:30 p.m.

YUGOSLAVIA—Jan. 1-2 (New Year's), May 1-2 (International Labor Day), July 4 (Fighter's Day), Nov. 29-30 (Day of Republic).

Regional holidays: April 27 (Osvobodilna Front Formation Day), Slovenia; July 7 (Uprising Day), Serbia; July 13 (Uprising Day), Montenegro; July 22 (Uprising Day), Slovenia; July 27 (Uprising Day), Croatia, Bosnia and Herzegovina; Aug. 2 (National Day), Macedonia; Oct. 11 (Uprising Day), Macedonia; Nov. 1 (Day of the Dead), Slovenia.

ZAIRE—Jan. 1 (New Year's), Jan. 4 (Martyrs of Independence), May 1 (Labor Day), May 20 (MPR Day—National Political Party), June 30 (Independence Day), Aug. 1 (Parents' Day), Oct. 14 (President Mobutu's Birthday and National Day of the Youth), Oct. 27 (Anniversary of Changing Name of Country to Republic of Zaire), Nov. 17 (Armed Forces Day), Nov. 24 (Anniversary of New Regime).

ZAMBIA—Jan. 1 (New Year's), April 16 (Good Friday), April 17 (Holy Saturday), May 1 (Labor Day), May 24 (Africa Freedom Day), July 5 (Heroes Day), July 6 (Unity Day), Aug. 9 (Youth Day), Oct. 24-25 (Independence Day), Dec. 25 (Christmas).

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about upcoming trade exhibits and trade missions, licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, and details on major construction and expansion projects.

U.S. Promotions Abroad

For more facts on these and other U.S. exhibitions write: Director, Office of International Marketing, Rm. 4015, U.S. Department of Commerce, Washington, D.C. 20230. For trade missions: Rm. 4219, U.S. Department of Commerce, Washington, D.C. 20230.

Hotel, Restaurant and Catering Equipment Exhibits. Paris Trade Center, Jan. 26-29; Lyons, France, Feb. 3-5. The market in France offers strong prospects for American manufacturers of hotel and restaurant equipment. The need for expansion and modernization in the tourism industry has been recognized and the French Government is providing various incentives to stimulate such investment. Industry, schools and hospitals are expanding catering and service facilities. The French are expected to invest about $1.5 billion on hotel, restaurant and ancillary equipment during the 1975-78 period. Beryl Cohen, 202-967-4961.

Analytical Instruments for Science and Industry Exhibitions. U.S. Trade Center, Frankfurt, Jan. 27-30; U.S. Trade Center, Stockholm, Feb. 3-6. The German market for laboratory instruments amounted to $218 million in 1974 and is expected to reach $280 million in 1979. The U.S. is expected to account for almost $50 million by 1979. The Swedish market for laboratory instruments, $74 million in 1974, is expected to expand 17 percent yearly through 1979. Maurice Peter, 202-967-4256.

Port and Shipyard Equipment Trade Mission to Greece, Yugoslavia and Italy. February. Major port improvement and expansion projects, coupled with reopening of the Suez Canal, offer tremendous opportunities for U.S. manufacturers. Among products/services offering best potential are: container terminal equipment, port ·traffic control equipment, conveyors for transporting bulk cargo, refrigeration warehouse equipment, shipbuilding, ship supply and ship repair equipment. and engineering and port design services. Call E. Lee Carteron, 202-967-4511.

African Semi-Arid Land Development Applications and Technology Seminars. February and May. Two separate events are planned that deal with large-scale land development in semi-arid regions of Africa. There will be seminar sessions in Central African countries of Nigeria, Sudan and Botswana in February and the North African countries of Algeria, Morocco and Tunisia in May. Fred Crosley, 202-967-5285.

Third Ghana International Trade Fair. Feb. 1-15. The U.S. Department of Commerce in coordination with the U.S. Department of State is sponsoring a Commercial Presence Fair in conjunction with the Third Ghana International Trade Fair to be held in Accra. The fair will receive vigorous support from Ambassador Shirley Temple Black and the American Embassy Staff in Accra. Contact Bradley Tyrrell, 202-967-5285, for general information, or Ralph Graner, American Embassy, Accra, for specific details.

Educational and Industrial Training Equipment Exhibition. U.S. Trade Center, London. Feb. 2-6. Directed to local education authorities, headmaster conference schools, universities, professional colleges—both military and civilian, 23 industrial training boards, and training and resource centers in the United Kingdom. Targeted to vocational and management training (administrative, marketing and sales) as well as to academic end-users, this exhibition will be of special value to U.S. producers whose audio-visual instructional systems are versatile enough to encompass more than one application. William Flanagan, 202-967-4461.

Energy Systems Exhibition. U.S. Trade Center, Tehran. Feb. 15-19. The Government of Iran has made development of the power sector a high priority item, since it is one of the key factors affecting the pace of industrialization. There is a $350 million market in Iran for power generating, transmission and distribution equipment. By 1979, the market will grow to $700 million per year as Iran attempts to keep up with the 15 percent yearly increase in power demand and consumption. Local manufacturers will be able to supply less than 10 percent of the required equipment through 1980. Karl S. Reiner, 202-967-2952.

Hi-Fi Equipment and Electronic Musical Instruments, Milan. Feb. 16-19. A special opportunity to show and sell the latest in hi-fi equipment and electronic musical instruments is being offered to a limited number of American manufacturers. The U.S. Trade Center staff in Milan will launch an exceptional promotional campaign aimed at the widest possible trade and consumer audience exposure; amplifiers, speakers, synthesizers, electric guitars, electronic organs, and pianos are some of the items that will make up the exhibition. Mike Springmann, 202-967-3957.

Woodworking Equipment Exhibition. U.S. Trade Center, Taipei. Feb. 16-20. By 1976, Taiwan's imports of woodworking equipment are expected to exceed $10 million. The U.S. share of these imports is expected to increase from 6 to 8 or 9 percent. Taiwan has an internationally competitive woodworking industry. It is the second largest supplier of plywood to the U.S. (over $200 million). Andre Williams, 202-967-2396.

Scientific, Medical, and Industrial Instrumentation Catalog Exhibit. India. Feb. 17-27. A potentially lucrative market exists for U.S. suppliers of sophisticated instruments in these fields. Imports of products with advanced design have risen steadily in the last three years, and this trend is expected to continue for the next three. The rate of growth is estimated at 25 percent per year, with the U.S. share at about 25 percent of the $25 million total. Bombay and New Delhi will be the sites for February, with subsequent exposure of the catalogs in Calcutta and Madras. Robert E. Peterson, 202-967-3973.

Process Measurement and Control Technology Seminars to Korea, Taiwan and Hong Kong. Feb. 18-March 2. Plastic, synthetic fiber and other petrochemical industry processing is expanding in the Far East. Many firms in these industry segments are seeking new techniques to increase productivity and quality. The Republic of China Government alone is investing over $500 million. These potential customers are unaware of what American companies have to offer them. These seminars are designed to persuade customers to buy from participating panel members. Fred Crosley, 202-967-5285.

Pro-In '76, International Design Engineering Conference and Exhibition. Duesseldorf. Feb. 21-25. This exhibition, the first of its kind in Germany, will feature components, materials and technologies. It is international in scope and is structured to reach a broad market. Included are: materials, shapes and forms, mechanical and power transmission components, fluid power — hydraulic and pneumatic, electrical and electronic power and control and joining systems and components. Don Schmadel, 202-967-2177.

Chemical/Petrochemical Processing Equipment and Instrumentation Exhibition. U.S. Trade Center, Mexico City. Feb. 23-27. The chemical/petrochemical industry is one of Mexico's most dynamic, growing at an annual rate of 15 percent. Between now and 1980, Mexico must invest $520 million per year in new plant and/or expansion programs to satisfy domestic demand for chemical products. This means heavy purchases of equipment and instrumentation. Anita F. Brownstein, 202-967-4464.

Timber Equipment Trade Mission to Philippines and Malaysia. Feb. 24-March 5. Philippine investment in wood processing plant is expected to exceed $100 million. To absorb the anticipated timber surplus in 1976, the country must build 7 new veneer mills, 8 plywood mills, 7 lumber product mills, 5 pulp mills and 2 specialized mills. West Malaysia is a principal market for woodworking equipment of all kinds, plywood and veneer processing, furniture, pulp and paper, construction and handicraft production. Edward Oliver, 202-967-3749.

Pollution Control Equipment Trade Mission to Brazil and Colombia. March. Market research for both countries indicates demand for air and water pollution control equipment, as well as for control, measuring, sampling and analyzing instruments. The Brazilian market for air pollution control equipment is expanding rapidly and is expected to reach $104 million in 1976. Wanda L. Ale, 202-967-4511.

Materials Handling Equipment and Systems Technical Sales Seminar. Poland, Hungary and Romania. March. Representatives of seven U.S. companies will spend three days each in Warsaw, Budapest and Bucharest. Audiences will include technicians and engineers representing institutes and end-users, as well as executives from official foreign trade organizations who confirm import decisions. Market research shows strong interest in a variety of areas including computerized warehousing, specialized light trucks, straddle carriers, overhead cranes and hoists, automatic identification systems and intermodal containerization. Michael Hoole, 202-967-4810.

In-Store Promotion. Blokker, Amsterdam. March, May. Gebr. Blokker B.V. will hold a major promotion of U.S. consumer products in its 42 retail stores. U.S. products will be advertised in Blokker catalogs. Store contact is J. Blokker, Director, Gebr. Blokker B.V., Van der Madewag 13, Amsterdam. Mollie Cleveland, 202-967-4705.

Process Control Instrumentation and Equipment Exhibition. U.S. Trade Center, London. March 1-5. The United Kingdom, one of the world's most industrialized and technologically sophisticated nations, has a high level of demand for process control instrumentation and equipment. Sales of these products fluctuated between $165 and $176 million annually during the 1970-73 period. Products of American design continue to dominate the market and should supply a major portion of the $190 million in sales projected for 1978. J. R. Crown, 202-967-2888.

Industrial Maintenance and Plant Operations Exhibition. U.S. Trade Center, Milan March 2-6. Commerce will launch an intensive promotion aimed at attracting major end-users not only in Italy but also those in surrounding countries. Exhibits will include noise analyzers, resuscitators, explosion protection systems, power sweepers, incinerators, dust collectors, trash compactors, fume and gas scrubbers, conveyors, work trucks, remote control devices, etc. Will run concurrently with and at the same location as the International Heating and Ventilation (H-VAC) Show. Sam Spaulding, 202-967-4508.

Printing and Graphic Arts Equipment Exhibitions. Paris Trade Center, March 8-11; Stockholm Trade Center, March 16-19. Strong and growing demand for PGA equipment in France and the Scandinavian countries has been identified by market research. PGA equipment sales in France are expected to expand at an average annual rate exceeding 11 percent in the 1972-1977 period, reaching $264 million in 1977. Scandinavian demand for U.S. PGA equipment resulted in U.S. exports to the area in January-June 1975 at a rate of 17.6 percent above the $28.2 million total for 1974. U.S. producers should be active in these markets, where dependence on imports for PGA equipment runs as high as 80 percent. Charles M. Whitley, 202-967-5381.

Commercial and Industrial Security Equipment Trade Mission to Spain, Switzerland and Italy. March 8-22. The $50 million import market for security goods shared by these countries is expected to expand significantly with the coming European economic recovery and an increased concern for security, both personal and proprietary. Recent market research in these countries indicates high demand for products of the following nature: microwave, infrared and ultrasonic detection devices; identification and automatic checking systems; anti-shoplifting devices; safes, vaults and alarm systems. Don McDonough, 202-967-4918.

Microwave Technology Exhibition. U.S. Trade Center, Frankfurt. March 9-12. The U.S. is Germany's principal foreign supplier of all types of microwave products and our share of the overall market exceeds 40 percent. This exhibition will embody the complete engineering and product areas of the microwave industry which are: antennas, materials, passive components, semiconductors, solid state components, systems and subsystems, tubes and amplifiers, test instruments and equipment. A technical conference will also be included. Leslie Pierson, 202-967-2177.

Ninth Cairo International Trade Fair. March 10-31. Economic activity in Egypt has greatly accelerated during the past two years and the investment climate continues to improve. Egypt has great potential as a regional economic center. A number of U.S. firms have expressed interest in participating in this event within an official U.S. pavilion, considering it an excellent opportunity to capitalize on commercial possibilities in Egypt and the Arab world. Invitations to participate are issued by the American Embassy, Cairo. General information is available from Bradley Tyrrell, 202-967-4304.

AM-TECH '76. Exhibition of U.S. Business Machines, Computers and Graphic Arts Equipment. Ellerslie Race Course, Auckland, New Zealand. March 15-19. AM-TECH '73 attracted 5,300 registered trade visitors and resulted in immediate sales of $1.9 million. Irwin Nathanson, 202—967-4957.

Computer '76. U.S. Trade Center, Tokyo. March 15-19. The theme of this exhibition is computers and related equipment: general purpose digital computers and peripheral equipment, and data transmission equipment. Call John Wolf, 202-967-2461.

Building and Construction Equipment and Supplies Catalog Exhibition. Honduras, Nicaragua, Panama. March 15-31. Catalogs and sales literature of U.S. companies will be shown to prospective buyers and agents in these three countries. Honduras, hit by Hurricane Fifi in September 1974, has earmarked $60 million for reconstruction and has identified $200 million of non-hurricane related projects. Nicaragua, in a construction boom following the 1972 earthquake, will spend $24 million on water systems, $20 million on sewage facilities, $40-50 million for seaport expansion and additional millions for construction of schools, hospitals, housing and commercial enterprises. Panama's ambitious capital development program includes projects planned for construction starts through 1977 valued at over $500 million. Major projects include development of energy plants, and facilities for tourism, health and education. Robert E. Peterson, 202-967-3973.

Media U.S.A. Catalog Exhibit. Liberia and Kenya. March 16-25. Will feature all types of published matter as well as audio-visual materials. Liberia is one of America's most important trading partners in Africa. The U.S. enjoys approximately two-thirds of the $600,000 "printed matter" market and could increase this share in 1976. Kenya has embarked on an ambitious educational expansion program which should raise the 1974 media import level of $6.7 million. The current U.S. share of the market is $458,000. Despite strong competition from British publishers this sizable market is well worth cultivating. Robert E. Peterson, 202-967-3973.

Retail Trade Techniques and Equipment Exhibition and Seminar. Moscow. March 22-26. The USSR Ministry of Foreign Trade has expressed strong interest in market-research and demand-forecasting techniques; computerization in inventory control and warehousing; point-of-sale and laser/optical reading systems; point-of-sale weight, value and purchase-price equipment and wrapping and packaging equipment; store layout, design, and fixtures; fast-food equipment and techniques. Richard C. Bell, 202-967-5163.

Materials Test and Quality Control Equipment Exhibition. U.S. Trade Center, Milan. March 23-26. Italy's extensive, sophisticated, manufacturing complex in the metal, mechanical, electro-mechanical and electronic product areas looks to the U.S. for advanced materials test and quality control equipment. Production, research and development engineers of Italian automotive, aircraft, railway, power generation, home appliance, machinery and electronic manufacturers and metal processors will attend. Non-destructive testing equipment; circuit testers; shock, vibration, stress measuring equipment; crack and seam testers; metallurgical test equipment; electron microscopes; and industrial x-ray equipment are among many items of special interest. Imports are estimated at $80 million annually. Philip Christenson, 202-967-4508.

Avionics and Ground Support Equipment. U.S. Trade Center, Mexico City. March 29-April 2. Mexico is substantially upgrading its air traffic control and airport equipment on a nationwide basis so as to have modern facilities with which to serve its growing tourist and commercial market. U.S. equipment is preferred by Mexicans, who are very familiar with American practice in this field. A technical conference will be included to enhance attendance. Ferenc Molnar, 202-967-2428.

Hospital and Medical Equipment Catalog Exhibit. Johannesburg and Cape Town. March 29-April 9. The import market in South Africa for pharmaceuticals, hospital and medical equipment totaled $86 million during the first 11 months of 1974, an increase of 23 percent over the 12-month level of $70.2 million in 1973. A number of hospital expansion projects are planned or are already under way. Nine new hospitals are scheduled for completion in Transvaal Province by the end of 1980. Before 1983 the Transvaal Provincial Authority plans to construct additional facilities for 2,250 beds in four locations. Robert E. Peterson, 202-967-3973.

Pollution Control Equipment Exhibition. U.S. Trade Center, Paris. March 30-April 2. French investment in pollution control equipment is substantial and growing fast. Rapid industrial expansion with its impact upon the environment has caused the French to examine their quality of life. Forecasts indicate that they will spend about $1 billion during the 1976-78 period in this area. American manufacturers and suppliers of equipment for the control of air and water pollution, sewage treatment and solid waste disposal can reach a broad audience of customers from French industry and government. George Ruffner, 202-967-4941.

Health Care Technology Seminars to Philippines, Taiwan and Korea. March 31-April 14. New priorities in public health, upgrading quality and quantity of medical services, establishing new hospitals, and preference for U.S. technology point to greater sales opportunities for U.S. companies. The proven format of seminars, chaired by a recognized authority in the medical field, is designed to assist U.S. companies in enhancing their technological credentials and consequently their export sales to these Far Eastern markets. Seminars comprise eight presentations covering the most important aspects of health care as identified by market research. Fred E. Crosley, Jr., 202-967-5285.

Telecommunications Equipment and Systems Exhibition. U.S. Trade Center, Sydney. April 5-9. In 1974-75 the estimated size of the Australian communications market was $305 million. In five years this market is expected to reach $468 million, averaging a growth rate of almost 9 percent. The U.S. accounts for 25 percent of the import market, which is growing at an annual rate of almost 13 percent. U.S. state-of-the-art equipment and technology is highly regarded but has not as yet been aggressively marketed in Australia. Irwin D. Nathanson, 202-967-4957.

Automotive Parts, Accessories and Service Equipment Exhibition. U.S. Trade Center, London. April 5-9. The British market for these is expected to expand at a significant rate during the next several years, as British motorists tend to keep their old cars longer and to maintain them better. Also, there is high public concern for highway safety and for a clean environment. Best market prospects are for engine and exhaust analyzers, brake testing equipment, portable jacks, mechanics' power tools, and electrical system parts. The U.K. market for diagnostic, maintenance and repair equipment exceeded $41 million in 1974, and is projected to reach $74 million in 1978, representing a 15 percent average annual rate of increase. Sam Dhir, 202-967-3275.

Security and Safety Equipment Exhibition. Frankfurt Trade Center. April 6-9. The German market for security and safety equipment is expected to reach $554 million by 1976. Excellent opportunities exist for American manufacturers since U.S. products are considered technically superior. Department and retail stores, as well as other industries in Germany, are continually on the lookout for newer and more sophisticated security and safety equipment. Best market prospects for safety equipment are the building trade, iron, metalworking, automotive, stone and clay industries. Robert Wallace, 202-967-3748.

Building Materials and Construction Equipment Trade Fair. Saudi Arabia. April 12-17. Saudi Arabia is faced with the dilemma of how to modernize while still preserving traditional values. Its five-year development plan will inject about $100 billion into the economy and bring half a million foreign workers into the country. Specific goals of the plan are expanded health, education, and general welfare programs; construction of over 100.000 new homes per year; continued improvement in already established transportation, port, and communications infrastructure; accelerated development of industry, especially petroleum refining and petrochemicals, fertilizers and extraction and processing of mineral resources; and expansion of agriculture. Commerce is offering a uniquely integrated approach to these developments with a trade fair of 50 firms. Franc D. Manzolillo, 202-967-2515.

Technical Sales Seminar on Food Processing and Packaging Equipment. USSR, Romania and Czechoslovakia. April 12-23. Increasingly consumer-oriented economic policies and a need for plant modernization make Eastern Europe a fast growing market. This event combines a series of technical symposia with individual business appointments. Ralph S. Edwards, 202-967-2801.

Industrial Process Control Instrumentation Exhibit. U.S. Trade Center, Tokyo. April 19-23. It is estimated that this Japanese market by 1978 will reach $550 million, of which the U.S. share will be $57 million or approximately 10 percent of total consumption. Of total imports, $70 million for the year 1978, the U.S. share will represent 81 percent. Dan Chambers, 202-967-5751

CONSTRUCTION USA '76—Construction & Building Machinery & Equipment Exhibition and Technical Symposium. Taipei. April 19-23. This event, mounted in response to requests by officials of the Republic of China Government, is aimed at exposing end-users to the latest in U.S. high-technology machinery/equipment/systems in these trades. Growth rate of the construction and building industry, 13.5 percent in 1974, is expected to reach 15 percent annually by 1977, a $50 million market. Thousands of new housing units are planned, and the high-rise ban has been lifted. Dave Horridge, 202-967-2798 or 5545.

Aviation & Airport Development Technical Sales Seminar/Trade Mission to Venezuela, Ecuador and Brazil. April 19-30. Sales of U.S. avionics equipment to these countries (including all communications and flight instruments for civilian aircraft) topped $21 million in 1974, with an 88 percent increase forecast for 1975. Two of the three countries are petroleum exporters and have been benefiting from high international oil prices; a large part of their revenues is being devoted to infrastructural development, including aviation as a high priority sector. Airports in all three countries are now operating under severe pressures because of heavier air traffic. Market potential is greatest for sophisticated aircraft with larger load factors, automatic and semi-automatic electronic air traffic control systems, and instruments for all-weather flying. Call Jonnell Jacobson, 202-967-5285.

Food Processing and Packaging Equipment. Stockholm Trade Center, April 26-29; Paris Trade Center, May 4-7. Expanding demand for convenience foods and strong growth in export markets for Nordic specialty food products are expected to boost the Scandinavian market for food processing and packaging equipment from an estimated $290 million last year to $440 million by 1978. Imports supply over three-fourths of the region's requirements with direct U.S. sales projected to more than double, from $23 million to $54 million or a 15 percent share. Spurred by growing patronage of supermarkets, France's food processing industry is expected to increase outlays for relevant equipment from $434 million to nearly $600 million in the 1974-78 period. Imports are foreseen to increase even faster with more than a doubling in U.S. sales to about $20 million. The high regard for U.S. equipment, relatively greater price increases for European machinery and growing requirements for long-run, high-capacity equipment offer a bright sales outlook in both markets for U.S. manufacturers who may participate in one or both of these "tandem" exhibitions. William Beiring, 202-967-3276.

In-Store Promotion. Nouvelles Galeries, Paris. April 26-May 29. American Bicentennial promotion of a variety of U.S. consumer products. Special exhibits will be featured in many of the 60 participating stores throughout France. The U.S. buying office is SONAC-Nouvelles Galeries, Attn. Bernard Chene, 11 W. 42nd St., New York, N.Y. 10036. Mollie Cleveland, 202-967-4705.

Advanced Welding Equipment JEEP. U.S. Trade Center, London. April 27-29. Good sales prospects exist for this equipment in the U.K. market, particularly in the expanding offshore petroleum, nuclear power and aerospace sectors. Among products of special interest to British buyers are plasma arc, electron beam, laser and ultrasonic welders. U.S. exports to the U.K. are increasing at a rapid rate now that American welding equipment, long known for its technological superiority, is price competitive. William G. Jordan, 202-967-4541.

Food Processing and Packaging Equipment Catalog Exhibit. Sudan and Kenya. April 27-May 5. The Sudan has 200 million acres of arable land, which has attracted financial interest from oil-rich Arab countries as a major source of food by 1985. As a result the Sudanese will be importing food processing and packaging machinery well above the $6.6 million 1973 level. Kenya's needs for expansion and improvement of food processing plants are estimated at $33.6 million over the next few years. Robert E. Peterson, 202-967-3973.

Materials Handling Equipment and Systems Trade Mission to Morocco, Ivory Coast and Zambia. April-May. Some $50 million worth of materials handling equipment and related systems is expected to be imported by these three African nations over the next few years. With obstacles to non-EEC imports being reduced and growing activity in freight, mining, timber, agricultural and manufacturing sectors in all three countries, new demands for materials handling equipment will be necessary elements for continued economic development. Bill Bushwaller, 202-967-4511.

Printing and Graphic Arts Trade Mission to Australia and New Zealand. April-May. Recently conducted market research in Australia indicates a favorable market there for American manufactured printing presses, phototypesetting and composition machines and systems, platemaking equipment, scanners, color separation systems and densitometers. Opportunities in the New Zealand market are expected to be similar to those in Australia. Edward Oliver, 202-967-3746.

In-Store Promotion. David Jones Ltd., Sydney. May. David Jones Ltd., the largest department store chain in Australia, will stage a major promotion of U.S. consumer products. Eighteen of its stores throughout the country will feature a wide variety of U.S. goods, plus special exhibits and attractions. U.S. buying representatives for David Jones are: R. W. Cameron & Co., 420 Lexington Ave., New York, N.Y. 10017; and Frederick Atkins Inc., 117 West 9th St., Los Angeles, Calif. 90015. Mollie Cleveland, 202-967-4705.

In-Store Promotion. Kendal Milne (House of Fraser), Manchester. May. Kendal Milne, a leading department store in the English Midlands and regional headquarters for the House of Fraser, largest retail group in the U.K., will stage a U.S. Bicentennial promotion in May. Store contact is Miss Ann Leuty, Kendal Milne, Deansgate, Manchester M60 3AU, U.K. U.S. buying office is Associated Merchandising Corp., Attn. Henry E. Miller, 1440 Broadway, New York, N.Y. 10018. Mollie Cleveland, 202-967-4705.

Electronic Production and Test Equipment. U.S. Trade Center, Frankfurt. May 4-7. The German market for electronic production and test equipment is expected to reach $343 million by 1977. Excellent opportunities exist for American manufacturers since U.S. products are considered technically superior. Also, the German market is too small to warrant local manufacture of highly specialized computer-controlled production and test equipment. As a result German manufacturers are continually on the lookout for new and more sophisticated equipment. Best market prospects are communications equipment, cleaning equipment (ultrasonic and plasma), and entertainment products. Don C. Schmadel, 202-967-2177.

Industrial Education and Vocational Training Aids Exhibition. U.S. Trade Center, Mexico City. May 10-14. The Mexican Government and around 8,000 enterprises throughout the country are looking for ways to upgrade training and technical skills of the work force. Rising wage scales and competitive world market conditions are causing employers to turn to modern teaching methods of improving worker efficiency and productivity, and U.S. procedures are highly regarded. Walter Bastian, 202-967-3636.

Business Equipment and Systems Catalog Exhibit. Hong Kong and Philippines. May 10-21. In both of these markets the number of commercial establishments is increasing. Rising costs are stimulating interest in modern, efficient office practices, equipment, and systems. U.S. equipment enjoys an excellent reputation and strong market position. To keep ahead of aggressive competition from other countries, American firms need to increase awareness of their availability in these markets. Robert E. Peterson, 202-967-3973.

Computers, Related Equipment and Systems. EDP 76, U.S. Trade Center, Milan. May 11-15. U.S. exports of computers and related equipment to Italy are expected to increase by as much as 20 percent annually in real terms through 1977. The total market for computer equipment in Italy reached about $450 million in 1974, with imports accounting for about $250 million. U.S. exports and products of overseas subsidiaries of U.S. companies hold a dominant position in the Italian computer market. Don Mathes, 202-967-3957 or 2434.

American Furniture Show. U.S. Trade Center, Tehran. May 16-20. There is an excellent market opportunity for manufacturers of hardwood, residential furniture in Iran. High-quality, elaborate office furniture and institution furniture will also find good opportunities. Ministry of Economy estimates show a rapid growth for furniture imports: residential furniture imports will grow from $7.9 million in 1975 to $27.3 million in 1977 and $49.1 million in 1980 while total imports grow from $16.5 million in 1975 to $39.5 million in 1977 and $65.9 million in 1980. Manufacturers of woodworking machinery that increases efficiency and upgrades quality in furniture manufacturing will also find a good market. Jack P. Orlando, 202-967-2952.

Health Care Instruments and Equipment. U.S. Trade Center for Scandinavia, Stockholm. May 17-21. Strong demand on outside sources for equipment with a high degree of technical sophistication continues to characterize the health care markets in the four Scandinavian countries. U.S. exports to Scandinavia are increasing substantially, with shipments in 1975 expected to reach a level 20 percent greater in value than the $17.2 million in 1974. The United States is a major supplier of equipment for all the Nordic countries. Despite keen competition from other European sources of supply, U.S. market shares continue to gain. In Sweden, the principal market in Scandinavia, the United States provides over 30 percent of demand for several types of advanced equipment. Robert Blake, 202-967-3088.

Toys, Games, and Hobbycraft Exhibit. U.S. Trade Center, Tokyo. May 17-21. The United States is presently Japan's largest single foreign supplier of toys, games, and hobbycrafts, with 40.6 percent of a total import market valued in 1974 at some $70 million. By 1977 total imports are projected to increase by nearly 30 percent over current levels. Larger disposable income and increased leisure time have created demand for imaginative, high quality, and sophisticated products of the sort produced by many U.S. manufacturers. The market for hobbies and crafts, especially, enjoys good sales potential, as Japanese manufacturers have virtually ignored it. John F. Whiteley, 202-967-2426.

Agricultural Machinery and Equipment U.S. Solo Exhibition. Caracas. May 17-22. The U.S. has a 60 percent share of the Venezuelan market for agricultural equipment and machinery, estimated at $63 million in 1974 and expected to grow 25 percent in 1975. This event is designed to take advantage of Venezuela's quest for self-sufficiency in food, especially grains and meat products, as the government programs surplus oil revenues for rural roads, irrigation systems and commodity storage facilities. A full range of on-farm equipment such as agricultural machinery, implements, grain cleaning, drying, storing, crop spraying, land irrigation, draining and poultry and dairy farm equipment is desired. Stephen F. Hall, 202-967-4832.

Petrochemical Equipment & Processes. Budapest International Spring Fair. May 19-27. The petrochemical industry has consistently enjoyed the highest growth rate of all industrial sectors in Hungary. A large percentage of investments in this industry have been spent on imports from the West. Jim Robb, 202-967-4810.

Laboratory Instruments Exhibition. U.S. Trade Center, Taipei. May 24-28. There is a rapidly growing market in Taiwan for laboratory and scientific instruments required to conduct research and development, with the emphasis on industrial and applied research. Total R&D expenditures, estimated at $35 million in 1974, are expected to reach $56 million by 1979. The prime market is for instruments and apparatus related to: petrochemicals and plastics, electronics, steel and shipbuilding, nuclear power, agriculture, fishing, oceanography and military applications. Pegey Kelleher, 202-967-4227.

Textile Machinery & Fiber Technology, INGLEGMASH-76. Moscow. May 25-June 8. Modernization of the Soviet textile industry is resulting in large imports of specialized textile machinery and fibers' technology. In the current 5-year period, production of knitted goods is planned to grow by 50 percent and some chemical fibers by 80 percent. Continued growth in these areas under the next 5-year plan offers increased opportunities. Dick Bell, 202-967-5163.

Clean Air and Water Exhibition. U.S. Trade Center, Sydney. May 31-June 4. The Australian pollution control market, currently valued at $85 million, is expected to grow at a rate of 9 percent. The U.S. accounts for 40 percent of the import market, which is expected to grow at a rate of 7 percent. Irwin D. Nathanson, 202-967-4957.

MESUCORA (Instrument-Automation) Trade Fair. Paris. June 10-17. Long-range plans for industrialization coupled with current heavy demands for process control instrumentation, automation systems, test and measuring equipment, industrial process and data handling computers, and nuclear instrumentation in France and the rest of Europe, offers bright prospects to U.S. manufacturers. MESUCORA, held only once every three years, has proven highly successful for participating firms. At the last show in 1973 the 1,339 exhibiting companies reached over 48,000 trade visitors. John Bodson, 202-967-5381.

Communications Equipment. U.S. Trade Center, Mexico City. June 14-18. Mexico's communications equipment needs present an excellent market for U.S. manufacturers, especially in the fields of fixed and mobile two-way radio, CCTV, repair, maintenance and calibration instrumentation. Prospects are also excellent for suppliers of broadcast equipment, both radio and television, as well as professional motion picture equipment. A technical conference will afford the opportunity to discuss latest industry developments with Mexican decision-makers. Fred Tower, 202-967-2313.

Plastic Processing Machinery and Plastic Materials—PLAST 76. Milan. June 20-26. American manufacturers can significantly increase their share of what promises to be a more than $40 million import market in 1976. U.S. technology in this field is highly regarded. Jerry Morse, 202-967-3957.

USAQUIP '76. Exhibition of Materials Handling Equipment, Building Supplies and Equipment and Packaging Machinery. Kuala Lumpur, Malaysia. June 21-25. With a 2 percent growth in GNP in this depressed year, Malaysia is set to expand again as the world comes out of its slump. With $1.3-1.5 billion in gold, foreign exchange and net external reserves, plus a sound currency and 7 percent inflation rate in 1975, Malaysia offers the best in business opportunities in Southeast Asia. Materials handling equipment worth $23 million was imported in 1973, of which 8.4 percent came from the U.S. Growth in this market is expected to be 6-8 percent annually in the next few years. Some $19.5 million in building supplies and tools was imported in 1973, with 8.5 percent from the U.S. Packaging machinery imports in 1973 were $3 million, 14 percent from the U.S., and are expected to grow 10 percent per year. Roy Mitchell, 202-967-2051.

Machine Tools, Metalworking and Shipbuilding Exhibition. Bilbao, Spain. June 21-26. Spain is expecting to achieve a 3 percent rise in GNP in 1976, partly due to its expanding metalworking-finishing industries, where the current import market is estimated at some $90 million. Included are the more advanced classes of electrical-discharge and electro-chemical machines, numerical and computer-controlled machines, and all classes of multiple operation and automatic and semi-automatic machines. Local manufacturers are now looking for large automated equipment which is superior to European equipment; flexibility and productive capacity are more important than price. Roger Turner, 202-967-3957.

Metalworking & Finishing Equipment Exhibition & Seminar. U.S. Regional Trade Center, Singapore. June 22-25. This market in Singapore has been expanding rapidly in response to increased demand from the shipbuilding industry, offshore oil firms and other industrial enterprises. In 1974, market consumption was estimated at some $82.4 million. By 1978 this figure is expected to reach $161.5 million. Space limited. Call J. Lee Barnes, 202-967-3893.

Noise and Vibration Control and Analysis Exhibition. U.S. Trade Center, Frankfurt. June 22-25. The German market for noise control equipment currently amounts to about $10 million a year. This market sector will enjoy an annual growth rate of at least 20 percent during the next 3 years. However, vibration equipment in Germany is considered to still be in its infancy. U.S. manufacturers with new technology or equipment will find exceptionally good sales opportunities. Loretta Allison, 202-967-3748.

Electronics Industry Production and Test Equipment Exhibition. U.S. Trade Center, Taipei. June 28-July 2. The highly developed and once again expanding electronics industry in Taiwan seeks the most up-to-date electronics production and test equipment. This exhibition will feature a broad range of production, test, assembly and quality control instrumentation and equipment. Most of the 900 plus electronics firms in Taiwan are oriented toward the U.S. market and exhibitors at this event will find large numbers of buyers already attuned to American production techniques. In 1974 Taiwan exported US$903 million worth of electronic products. Space is limited. Dave Horridge, 202-967-2798.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

1041—BOLIVIA—Seeks U.S. firm for joint venture for **gold mining** on river Kaka, north of La Paz. U.S. collaborator must have experience and technical capability in mining placer gold deposits. American partner's equity likely to be 49 percent; will have management responsibility for actual operations. Bolivian central bank guarantee of investment is likely to be available. Area has rough topography, with difficult communication and transportation, but road building program is under way. Gral. Paul Placios, Genente General, CONFADENA, Avenida 6 De Agosto 2649, La Paz. Additional information from John H. Curry, Minerals Attache, U.S. Embassy, La Paz, APO New York 09867. P-75810. OPIC.

2034—ECUADOR—Technical assistance is sought to establish plant for **pineapple processing and dehydrating.** Projected production is 17-20 pineapples per minute. Final product—packaged, dehydrated pineapples—will be marketed under U.S. company's brand name. Expansion of product line to include other tropical fruit such as mangoes and papaya is contemplated. Company is medium-sized agent and representative for foreign firms, importers, real estate investors, construction contractors and consultants. Jaime Crespo, Consultores e Inversionistas Cia. Ltda. (CONESIA), P.O. Box 2715, Quito. WTDR. P-75785.

2037—AUSTRALIA — U.S. joint venture partner sought to expand operations. Firm has modern plant which produces **partially cooked, chilled french fries.** Sales are made to commercial users in several Australian cities. Company wants to expand sales to include supermarket trade. Prospective U.S. partner should be able to provide source of potatoes to fill annual gaps in Australian supply. Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-75807.

2330—ITALY — Leading apparel manufacturer seeks license to produce **young/junior fashion casual clothing including jeans and jackets.** Royalty payments are offered for know-how and use of brand name. Firm established in 1936, has 1,000 employees; produces about 3 million pieces annually, has sales volume of about $25 million. Firm's sales territory is all of Italy and the other Common Market countries. Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-75786.

2816—YUGOSLAVIA — Seeks licenses for complete technological package to **produce iron oxide.** Firm is part of a major Yugoslav manufacturing enterprise and produces ferrite components for electric and electronic applications. Ing. Jasminka Pftkovic, R&D Manager, E.I.-Fabrika Ferita, Batajnicki Drum 23, 11080 Zemun. Telex: 12237. P-75809. OPIC.

2834, 2893, 2851—SWITZERLAND—Seeks licenses to manufacture **high value pharmaceutical intermediates and raw materials for paint- and ink-making industries.** Well established importer/distributor of chemicals and phamaceuticals with 30 employees and annual sales of $13 million. Firm proposes to transfer licenses to some of its customers for production of these items. P. Hoffenberg, Technical Manager, Hans Rahn & Co., Wehntalerstr. 79, POB, CH-8057 Zurich. P-75811.

2879—VENEZUELA—Seeks licenses to produce **insecticides and selective and non-selective herbicides for agricultural use.** New firm formed by group of Venezuelan businessmen with capital of 2 million bolivars (US$1 = 4.3 bolivars). Will be located on 40 000 sq. meters of land in Charaliave, Miranda State. Miguel D. I. Stassi, QTA, Chuita, Calle Pasesandes, El Marques, Caracas. Telephone: 342534. P-75784.

2899—UNITED KINGDOM—Seeks license agreement or joint venture with U.S. firm for products or processes in **industrial wax field.** Firm currently manufactures waxes and crayons for tire and rubber industry, mold release agents, casting waxes, polishes and sealers and hot dip strippable coatings. Established in 1875, company has 30 employees and annual sales in excess of $1 million. J. W. K. Oates, Managing Director, Wilkins Campbell & Co., Ltd., Britannia Works, West Drayton, Middlesex UB7 7NT, England. P-75815.

3079—GERMANY—Seeks licenses to **manufacture new products related to water and air pollution.** Firm manufactures and distributes **products made of polyurethane elastomers.** Established in 1949, company employs 500, has annual sales of $16 million. Peter Schmidt-Prestio, Prokurist, Kunststoffwerk Philippine GmbH & Co., KG, D-5420 Lahnstein-2, Max Schwarz Strasse 23. Telephone, 02621-2066; telex, 0869807. P-75823.

3261—SOUTH AFRICA—Seeks licenses for manufacture of **fiberglass household fittings,** such as basins, sinks, baths, shower cubicles, wall and ceiling panels and industrial fiberglass air receivers. Presently produces fiberglass yachts and desires to expand its operations. Representative of firm planning to visit U.S. in early 1976. Phillip Angel, Managing Director, Fibreglass Industries (Pty) Ltd., P.O. Box 30, Mondeor 2110, TVL. Telephone: 011/591561. P-75818.

3357—AUSTRALIA — Large manufacturer of variety of communications equipment seeks license. Wants to produce all forms of **cable and CATV systems.** R. Ainsworth, Transmission Products Pty. Ltd., Denison St., North Sydney, N.S.W. 2060. P-75792.

3411, 3585—DENMARK — Medium sized Danish manufacturer of transport equipment seeks licensing arrangement for production of **insulated containers** for distribution of frozen foods from storage to retail. Containers would be approximately 350 liters, of aluminum, plastic, fiberboard or steel. Size of Danish market for this product during next ten years estimated at $60 million. Firm employs 50, has distribution outlets throughout Scandinavia. Representative will be in U.S. Jan. 1-21. Write K. H. Juncker & Co., Industrivej 2, DK-4450 Jyderup, or Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. Telephone: 202-967-3786. WTDR. P-75788.

3431, 3469—UNITED KINGDOM—Established company interested in licensing arrangement to manufacture **household cookware and sanitary ware products,** either pressed, painted and/or with non-stick coating. Firm presently manufactures enameled cookware and sanitary ware and carries out sub-contracting for vitreous enameling, paint and epoxy coating and presswork. Company employs 50 with 8 salesmen. Hylton Davies, Welsh Enamelware Co., Cambrian St., Llanelli, Dyfed, Wales. P-75822.

3519—GERMANY — Seeks license to produce **solar engines and power systems.** Firm is medium sized manufacturer of high-quality rectifiers and related equipment, as well as quality controls. Company employs 60, moved into new, modern plant a few years ago. W. F. Heythekker, President, Regler- und Gleichrichterbau GmbH & Co. (RGB), D-5485 Sinzig. Postfach 1290 1290. P-75804.

3523—UNITED KINGDOM — A leading distributor of agricultural machinery and tractors seeks license to manufacture **hay and straw baler for large round or cylindrical bales.** Company has 70 branches throughout England; is engaged in agricultural engineering and marketing of farm implements. An affiliate, Bamfords Ltd., a well established agricultural machinery manufacturer, would undertake production of baler. F. H. Burgess, Mng. Dir., Frederick H. Burgess Ltd., The Green, Stafford, England. P-75812.

3531—MEXICO—Seeks joint venture to produce **hydraulic systems for use with tractor drive excavators.** Interested in **small model hydraulic systems for attachment to tractors.** System should be capable of reverse, as well as forward drive. New firm, plans to operate throughout Mexico has service capability. Communication requested in Spanish. Sr. Alejandro Fosado M., Gerente General, Maquinaria Para La Construccion, S.A., Anaxagoras 129. Mexico 12, D.F. Telephone: 536-5006, 536-5007 or 543-8931. P-75793.

3542—MEXICO—Firm seeks joint venture agreement with American firm to manufacture machinery and equipment used in formation of **wing nuts.** Firm's principal product line is hardware tools. Established 1969, employs 16. Manuel Gomez Drogiez, Industrias Deportivas, S.A., Insurgentes Norte 458 Local 9, Mexico 4. D.F. Telephone: 574-5216 or 574-5172. P-75790.

3559 — GERMANY — Seeks know-how licenses to manufacture **machinery and equipment for processing of durometric compounds.** Firm established in 1963, has 35 employees, annual sales of $1.4 million. It manufactures resins, caulking compounds and sealants. Kunststoff Eberhard KG, Postfach 930131, Olpener Str. 405, 5 Koeln 91. P-75808.

3563—MEXICO — Newly established firm seeks joint venture to manufacture **air compressors for industrial use.** Either portable or stationary type. Company plans to operate throughout Mexico; has service capability. Communication requested in Spanish. Sr. Alejandro Fosado M., Gerente General, Maquinaria Para La Construccion, S.A., Anaxagoras 129, Mexico 12, D.F. Telephone: 536-5006, 535-5007 or 543-8931. P-75794.

3564—MEXICO — Firm seeking licensing and/or joint venture arrangement to manufacture **industrial ventilators, large dust collectors and similar vacuuming equipment.** Firm manufactures this type of equipment but perceives larger market. Company has capacity to service such equipment. Also manufactures grinding and polishing equipment and noise control equipment. Sr. J. J. Roder, Industrias Pro-Metal, S.A., Calle Kelvin 26-4 or APDO. Postal 5-290, Mexico 5, D.F. Telephone: 545-7858. P-75791.

3569—AUSTRALIA—Manufacturer specializing in design, manufacture and installation of complete **packaging systems** seeks to extend its range of products by negotiating licensing agreements for suitable products. Company manufactures range of cartoning machines and auxiliary handling equipment such as conveyors. Peter Harding, New South Wales Centre, Suite 6259, Five World Trade Center, New York, N.Y. 10048. Reference: D75/149.

3569—SWEDEN—Seeks licenes to manufacture **special reverse osmosis filtration equipment.** Wants to produce equipment for filtering large molecules and small particles using reverse osmosis with coating on porous metal surface as filtration membrane. Company is owned by large, well known Swedish company. Sound financially. Ulf Malmstrom, Managing Director, AB Hedemora Verstader, Sturegatan 2, S-776 00 Hedemora. Cable, HEDVERK: telex, 7549; phone, 0225/12000. P-75802.

3573—UNITED KINGDOM—Manufacturer of data **communications equipment** seeks licenses to make products complementary to its present line. Company produces portable data terminals, telegraph and telephone converters and complete range of electro mechanical relays and switches. Employs 250. N. L. Harvey, Managing Director, K & N Electronics Ltd., Cordwallis St., Maidenhead, Berkshire, England. P-75813.

3585—DOMINICAN REPUBLIC — Seeks license to manufacture **window air conditioning units.** Firm interested in producing condensers, evaporators, covers and metal elements locally. U.S. licensor would supply other required components. Dominican firm engaged in sale and installation of air conditioning equipment, primarily to government organizations. Comercializadora Lationamericana, S.A., Calle Luperon No. 11, Santo Domingo. P-75800. OPIC.

3589—AUSTRIA — Newly established firm seeks **processes for recovery and recycling of materials contained in household garbage and industrial waste.** Would market in Austria. Werner Tauschitz, Manager, Abfalltechnik GmbH & Co., K.G., Carl Spitzweggasse 18, A-8042 Graz. Telephone: 03122 431644. P-75803.

3679—UNITED KINGDOM—Seeks license to manufacture **electrical, electronic and/or electro mechanical components.** Product interests include relays, small motors, switches, resistors, tape recording heads, flying disc or floppy disc heads. Firm presently produces magnetic recording heads and synchronous motors. Employs 250, reports annual sales of $2.2 million. K. F. Bacon, Managing Director, Magnetic Components Ltd., Penryn, Cornwall, TR10 8AR, England. P-75805.

3691—ECUADOR—Seeks license to manufacture 6, 12, and 24 v. **storage batteries** used in light-and heavy-duty motor vehicles. Firm is large and well managed retailer of motor vehicles. Feasibility study of the project is under preparation. Reportedly, present production of storage batteries is insufficient to meet demand. Ing Carlos Armenabar, Adm. Mgr., Transauto Cia. Ltda., Cassilla 4812, Quito. P-75806.

3732—AUSTRALIA—Manufacturer of wide range of caravans, seeks a licensing agreement for manufacture of **fiberglass sailboats** in 4.5-to 7-meter range. Desires to obtain complete specifications for such a sailboat, but would prefer to produce itself only fiberglass hull. Company employs over 300 people at its factory and markets its caravans through approximately 25 dealers which cover every major Australian city except Perth. Gerard Visser, Company Secretary, Chesney Industries Pty. Ltd., Post Office Box 160, Strathpine 4501, Queensland. Telex: AA41027. P-75817.

3792—UNITED KINGDOM—Firm seeks licensing arrangement to produce all types of **lightweight trailers, trailer tents,** which can be made on brake presses, folding machines, etc. Company presently manufactures trailer tents, baggage and boat trailers; also carries out sheet metal and fabrications and presswork assemblies. Established 1971, employs 60 with 4 salesmen. K. Barnes, Managing Director, Davitance (Engineering) Ltd., Knowl St., Stalybridge, Cheshire SK15 3AW, England. P-75816.

3800—GERMANY—Engineering firm seeks licenses to produce **industrial noise reduction systems.** Desires new-to-German-market systems designed to reduce noise associated with in-plant materials handling in steel mills, foundries and similar installations. Firm presently manufactures industrial personal safety devices and protective clothing. GIA, Gesellschaft fuer Industrielle Arbeitsschutzprodukte mbH, Postfach 845, Ewaldstrasse 14a, 463 Bochum, P-75789.

3811—GERMANY—Highly reputed producer and distributor of nautical instruments plans to diversify. Seeks licenses to manufacture **electronic nautical instruments.** Product interests include autopilots, beacons, navigational systems, radio and gyroscopic compasses, direction finders and radar systems. Company markets its products worldwide. Operates manufacturing facilities in Bremerhaven, enjoys high credit rating. Rainer Asskamp, Cassens & Plath, Am Lunedeich/Kompasshaus, 285 Bremerhaven-F P-75814.

3811 — UNITED KINGDOM — Manufacturer of **instrument test equipment** seeks a licensing arrangement for production of similar equipment. Firm operates as importer/agent of aircraft instruments and as service and repair organization for aircraft instruments. B. Hitchcock, Director, Pandect Instrument Laboratories Ltd., Wellington Road, High Wycombe, Bucks HP12 3PX, England. P-75819.

3811, 3841—UNITED KINGDOM—Manufacturer and agent of **sterile disposable plastic laboratory ware and medical products** seeks license for production of products complementary to its present line. Employs 350, annual sales volume is $8.6 million. R. B. Tait, Joint Managing Director, Sterilin Ltd., 43/45 Broad St., Teddington, Middlesex TW11 8OZ, England. WTDR. P-75821.

3824 — AUSTRALIA — Instrument manufacturer is seeking to extend its range of products to include manufacturer under licensing of **flow metering equipment and pressure switches.** Peter Harding, New South Wales Centre, Suite 6259, Five World Trade Center, New York, N.Y. 10048. Reference: D74/887.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Domestic Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate file number.

AUSTRALIA—License is offered for production of **bio-gas waste treatment systems.** Easily erected, systems produce a cheap, high-BTU fuel suitable for number of applications. File 2863

AUSTRALIA — Manufacturer wishes to license cartridge type, assembled **helical spur gear motors** of up to 80 hp. and **motorized or free shaft worm boxes** of up to 4 hp. Cross licensing or joint venture arrangement will also be considered. File 2864

FRANCE — U.S. licensees are sought to manufacture low-cost, **mechanical device of steel for raising and handling leads.** Equipped with extensible frame and pivoting side-members, device eliminates difficult operation of fitting blocks under particularly heavy and cumbersome loads. File 2865

FRANCE—Firm is interested in licensing or joint venture arrangement for its large (up to 1 million liters), **plastic-mounted fiber-glass containers** for chemical, beverage, and other uses. These vessels are made at installation site or in plant using wire-winding equipment, which can be truck-mounted. File 2866

GERMANY — Manufacturer of laboratory research equipment for rubber and plastics industries wishes to contact potential U.S. licensees regarding its **laboratory extruders, presses, and roller mills.** Equipment is already used extensively by large chemical industries throughout Europe. File 2867

GERMANY—Manufacturer and distributor of products made of polyurethane elastomers wishes to license production of newly developed **foam cube** (standard size 50 mm. x 50 mm. x 35 mm.). When distributed over polluted water surface, these cubes each absorb oil at rate of 20 kg. per sq. meter; oil can later be squeezed out and disposed of. File 2868

GERMANY — Licensees or joint venture partners are sought for U.S. manufacture of **counting devices for multi-jet turbine water meters.** Meter is designed to measure flows in either direction. File 2869

NORWAY — Inventor offers license for **plastic, collapsible clothers hangers,** particularly suitable for rapid hanging and unhanging of garments in clothing stores. File 2782

SWITZERLAND — Manufacturer of dental supplies wishes to license its system of **plastic patterns used in buildup of metal substructures for gold-porcelain or gold-acrylic dental prostheses.** Rights for **plastic pivots and protectors, FG diamond points,** and **dental labor diamond burrs** also will be offered. File 2873

UNITED KINGDOM—U.S. licensees or cross-licensing partners are sought for **semi-automatic labelers, sachet and cartoning machines, and vertical form, fill-seal machines.** File 2874

UNITED KINGDOM — Manufacturer of high-pressure water pumps and valves wishes to license its range of **high-pressure cleaners.** File 2875

Foreign Trade Inquiries

These trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Division, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1972 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Building construction

● **15100, 16200—INDIA**—Tender for supply, supervision of erection, and commissioning of complete plant (comprising hot rolling, cold drawing and finishing equipment) to manufacture carbon and low alloy seamless steel tubes of boiler quality in size range 14 to 159 mm outer diameter, wall thickness up to 12.5 mm, and lengths up to 15 meters. Annual output capacity should be 40,000 metric tons in two-shift operation by "push bench process." Supply should include complete mechanical and electrical equipment, including testing equipment, auxiliary systems, instrumentation, technological structures, all interconnecting conveying equipment, necessary pipings, valves and valve fittings, and other miscellaneous equipment. Tender documents (No. SSTP/-/75) may be obtained from Senior Purchase and Stores Officer, Bharat Heavy Electricals Ltd., Seamless Steel Tube Project, Tiruchirapalli 620014, India, for $25 through demand draft in favor of Chief Finance Manager, Bharat Heavy Electricals Ltd. Copies of tender inquiry available from Construction & Building Materials Program, Room 2118, U.S. Dept. of Commerce, Washington, D.C. 20230 (202-967-3602). Bid deadline Jan. 21.

Agricultural chemicals

28790—AFGHANISTAN—Supply of pesticides, veterinary pharmaceuticals, animal feed supplements, and agricultural hand tools required by Afghan government company. Send offers and other information to Mohammad Astafa Helaly, Commercial Vice-President, Afghan Fertilizer Co., P.O. Box 3206, Kabul.

Plastic products

3079XXX — GERMANY — Plastic components for machinery industry (e.g., for textile paper, converting, construction, chemical industries, food processing machinery). Reply ASAP to—Herr Beck, Mgr., Wefapress-Werkstoffe, Beck & Co., GMBH, 4426 Vreden, Postfach 4, Up de Hacke 21-23. Cable Wefapress; tel 02564/804.

Special industrial machinery

● **35590—TANZANIA**—Tender invited for design, supply, erection and commission of cement plant at Tanga, Tanzania. Bid deadline Feb. 15. Plant will include laboratory equipment, workshop tools and instruments. Bidders expected to furnish equipment, material and services and to install complete plant for production of 500,000 tons per year of ordinary Portland cement. Complete details on tender submission and requirement of 10 percent bond deposit given in tender documents. Details and specs. of locally available raw materials, water, electricity, climate, etc., also provided. Manufacture of cement will be based upon rotary kiln with dry process and suspension preheater. Tenderer should make best efforts to provide extensive and favorable credit terms. Tender issued by: Tanga Cement Co., c/o State Mining Corp., P.O. Box 4958, Dar es Salaam. For further interpretation and details relative to tender documents, contact consulting engineers who prepared tender with copy to Tanga Cement.

Anti-Boycott Policy

The Commerce Department henceforth will not disseminate tenders or trade opportunities which contain boycott conditions or are based on documents containing such provisions. Commercial documents originating from certain Arab nations usually contain restrictive clauses designed to carry out a secondary boycott against the State of Israel. The Department of State is instructing all Foreign Service posts not to forward any documents or any information on trade opportunities obtained from documents or other materials which are known to contain boycott provisions.

Address such inquiries to: Engineering and Consulting Co., Power and Industrial Division, Zeleni Venace 18, P.O. Box 712, Beograd, Yugoslavia. Telex: 11181 Yu Energo. Cables: Energo, Beograd.

● **35590—YUGOSLAVIA**—Supply and erection of one natrium perborate plant. Bid deadline Jan. 1. Capacity 24,000 tpy. Make bids in form of proposal. Bids must include preparation of raw material, production of metaborate, and perborate, drying, and transportation within factory at 30 percent concentration. Also should provide for transportation at 70 percent concentration in bags of 50 kilograms, detailed specifications and technological descriptions. Quote c.i.f. with separate prices for equipment, spare parts, technical documents, and know-how. Bid should include credit terms from supplier or other financing source. Reply to: Kombinat Sada-So, Kompleks Sredstava za Pranje, 75000 Tuzla, Yugoslavia.

General industrial machinery

● **35600 — COLOMBIA** — Seven turbine pumps, vertical, submersible with corresponding electric motors and all other accessories, for the Guatape Hydroelectric Project, second stage. Tender No. G-204; bid deadline Jan. 20. Seccion Deimportaciones, Empresas Publicas de Medellin, Edifico Miguel de Aguinaga Oficina 607, Medellin. Terms and specifications available at above address for 600 pesos for first copy and 300 pesos each additional copy ($1.00=33 pesos approximately). Partially financed by World Bank. Empresas Publicas de Medellin is public utility branch of Municipal Government and is semi-autonomous.

● **35600 — YUGOSLAVIA** — Turbo-compressor for air. Capacity 6,800 NM/H3. Nominal pressure 7 ATA. Cooled by water. Electrical motor three-phases, asynchronous, 6000 V, 50 cycles. Tender number S-3753; bid deadline Jan. 1. Uvozni Odjel, MK Zeljezara Sisak, Bogoviceva—1A, 41000 Zagreb. Quotation in three copies must contain spare parts specification for annual use, technical and technological description, assembly drawings, operating instructions, and instructions for trial run and maintenance. Financing will be from internal resources, but bids can quote credit terms.

3569998—SWEDEN — Vacuum & suction devices for lifting sheet metal by hand. Small to medium co. estab. 1947. According to local credit sources, has sufficient financial means at its disposal & payments met promptly. Recommended as suitable trade contact. Reply to— Mr. G. Engvall, AB Maskinteknik, Nybrokajen 7, S-111 48 Stockholm. Cable, Maskinteknik; telex, 10149; tel. 08/24 42 60.

Communications equipment

● **36610—TURKEY**—Ptt Genel Mudurlugu, Malzeme Dairesi Baskanligi, Ruzgarli Sokao Catal Han, Ulus, Ankara, has issued invitation to bid on 20,000 manual magneto telephone. Bid deadline Dec. 23. Bidding specifications in English available from Modern Transaltion Bureau, Karanfil Sokak 36/3, Yenisehir, Ankara, for $10.

● **36620—IRAN**—State Railways has issued tender No. 820/54 for supply of 3 units SSB receiver according to specifications and terms. Bid deadline Dec. 31. Copy of specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Div., BDC-466, Room 1001, U.S Dept. of Commerce, Wash., D.C. 202-967-5569.

● **36620—TURKEY**—Rayindirlik Bakanligi, Demiruollari, Limanlar ve Hava Medydanlari, Insaat Genel Mudurlugu, Malzeme Fen Heyeti, Mudurlugu, 1 No. Lu Cadre—B. Blok Yucetepe, Ankara (Ministry of Public Works) has issued invitation to bid on one each VOR equipment; transistorized, plug-in units and accessories. Bid deadline Dec. 24. Bidding specifications may be obtained from Modern Translation Bureau, Karanfil Sokak 36/3, Yenisehir, Ankara, for $12.50.

Aircraft, parts

3721127—JAPAN—Hanger gliders. Requester is importer of textiles from Europe & wants to handle hanger gliders, which are new to Japanese market. Financial ref: Sanwa Bank, Bakurocho Branch, Tokyo. Cable—Yasutaka Fujiwara, Mgr., Taiyo Boeki K.K., Kudanminami, Chiyoda-ku, Tokyo. Cable Formostwoolen Tokyo; tel. 03-265-6631.

Engineering, laboratory, scientific, research instruments

• **38110—MALAYSIA** — Bursar, Universiti Sains Malaysia, Minden, Penang, has issued invitation to bid for supply and installation of scientific equipment for use at School of Biological Sciences. Bid deadline Dec. 29. Tender documents available from above address for $2.50.

Optical instruments, lenses

3832108 — UNITED KINGDOM — Liquid chromatography products. Estab. 1970 & employs 14. Acts as agent/importer of lab. & scientific equip. in fields of biochemistry & analytical chem. Represents Altex Scientific, Berkeley, Cal., Gilson Med. Elecs., Middleton, Wis., B. R. Glass Inc., Md., & Analtech Inc., Delaware. WTDR 10/75. Reply to John G. Atkinson, Mng. Dir., Anachem Ltd., 20A North St., Luton, Beds LU 2 7QE. Tel 0582-37274; telex: 825275.

Surgical, medical, dental instruments

• **38410—KOREA**—Office of Supply, Government of Korea, Seoul, has issued tender No. ODA-75224-P III for equipment to outfit basic nursing laboratory, basic science laboratory nutrition dietetic lab., dormitory, etc. Bid deadline Dec. 23. Copy of specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-5569.

Toys, amusements, sporting goods

39490—SPAIN — Ramon Torramilans, of Orive-Fotosub, S.A. Dr. Ferran, 2 y 4, entlo., 1-B (Buzon 7) Barcelona, interested in contacting U.S. firms exporting underwater sporting equipment. Interested companies contact Sr. Torramilans at above address.

Scrap materials

5093XXX — PAKISTAN — Second-hand clothing, all sorts; quantity approx. 1,000 bales, value approx. $25,000. Requests c&f quotations against L/C, employs 5, including 2 in sales. Reply to—Mohammed Islam, Partner, Islam Bros., Mitha Mal Road, Quetta. Tel 74861.

Business services

• **73990—PAKISTAN**—Chief Engineer, Purchase & Disposal, Water & Power Development Authority (WAPDA), 742 Wapda House, Lahore, intends to appoint inspection agent in foreign countries for carrying out inspection of stores procured by WAPDA from foreign suppliers. Detailed terms and conditions specified in tender documents available from above address and from Resident Representative, WAPDA, 152-J/2, P.E.C.H. Society, for $1200 including air mail charges. Bid must accompany $500 as earnest money deposited in favor of Chief Engineer, Purchase & Disposal, WAPDA. Bid No. is CEP/2191/75/C and bid deadline Jan. 5.

Motion picture production, distribution

7813XXX—PAKISTAN—Teaching films, 16-mm, color, with sound, on various aspects of disection of human body, brain, eyes, etc. Medium-size importer seeking import on its own account and also wishes to represent U.S. suppliers. Requests f.o.b. and c. and f. (air freight) quotations separately with trade resale discount and complete literature. Possible sales potential $100,000. Company's annual sales reported $200,000. Employs 10. Reply to—Nazeer A. Syed, Proprietor, Reezan Trading Co., P.O. Box No. 1, 32 Maclagan Road, Lahore. Cable: Scientific; tel. 68105 312612. Direct sale and representation.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Plastic products

3079813—BOLIVIA — Packaging material, 10 cm wide in rolls. Printed in 2 colors for candy packaging, 2,000 kilos. Reply to—Gonzalo Ponce, Adimport, Casilla 6522, La Paz. Cable—Adimport.

Farm machinery

3523098—THAILAND—Machine that emits high sound to scare birds away from crops. Reply to—Prathip Chiaravanond, Mng. Dir., Chia Tai Seeds & Agricultural Co., Ltd., 295-303 Songwad Road, Bangkok. Cable Chiatai Bangkok; tel. 32570, 33743; telex Bk: 2211.

352365X—UNITED KINGDOM — Hay & straw balers for large pound or cylindrical bales, not rectangular shape. Specialist distributor of ag. machinery & tractors, claiming to be largest in Europe. Has 70 branches throughout U.K. & parent of group engaged as engineers' implement dealers & general ironmongers. Estab. 1900, it became public co. in 1947, has 1,846 employees & sales turnover of 23 million pounds. Would be prepared to mfr. appropriate machine under license in U.K. via its subsidiary co., Bamfords Ltd., Uttoxeter, Staffordshire, well-estab. ag. machinery mfr. which represents Allis Chalmers, Milw. WTDR 5/74. Reply to—H. F. Burgess, Mng. Dir., Frederick H. Burgess Ltd., The Greel, Stafford. Tel Stafford 3131; cable: Burgess Engineer Stafford.

Photographic equipment, supplies

3861XXX—THAILAND — Film developing solution, 500 gal., initial order. Presensitized offset printing plates: positive, size 0 25 x 586 x 890 mm., 20,000 impressions, 4,000 sheets; negative, same size, 100,000 impressions, 2,000 sheets; negative, size 0.3 x 690 x 840 mm., 1,500 sheets; negative, size 0.3 x 740 x 925 mm., 1,500 sheets. Requests samples & c.i.f. Bangkok prices. Photographic & graphic arts supplies. Plans order above materials from U.S. If satisfied, will order 4 shipments annually. Reply to—Mr. Vichai Thongmarongsri, Mgr., Thai Hin Haut Ltd., 522 Santiphap Rd., Bangkok. Tel. 217413. Excl. distr.

Future Construction Abroad

SPAIN—A local electrical power utility firm, Electra de Viesgo, is awaiting government approval to proceed with a **nuclear power project** called Central Nuclear de Santillan. Initial project designed to produce 900/1,000 megawatts of power at a location near the municipality of San Vicente de la Barquera in province of Santander. Total cost of project $417 million, equipment $283 million, equipment to be acquired abroad $167 million. Financing through company issue of stock and various borrowings from local financial institutions. Imported equipment expected to have Eximbank and commercial bank financing. Firm expects to obtain from foreign engineering/consulting firms basic engineering services for nuclear reactors and other consulting services in specialized areas. Equipment to be procured abroad includes pumps, heat exchangers, high pressure piping, nuclear and conventional instrumentation, valves, turbines (about 70 percent outside Spain) generators (about 50 percent outside Spain). Equipment deliveries will take place over four-year period 1978-1982. Project expected to be completed by end of 1982. Contact: Don Manuel G. Cortines, Managing Dir., S. A. Electra de Viesgo, Postal Apartado 35, Santander, Spain.

GUATEMALA—Municipality of Guatemala City is planning to buy a **sewage treatment plant** to serve maximum of 800,000 people by 1985. Although Municipality has not yet arranged financing, it wants to make contact with U.S. manufacturers of such plants that can supply equipment, supervise construction and train municipal personnel to run it. Municipality has consultant engineer doing feasibility study, does not wish to purchase through U.S. middlemen, and will undertake civil construction work itself. Interested in conventional type of plant, one which can easily be expanded to meet future requirements. Specifically would like technical data and quotations for package plant offering secondary treatment for flow rate of 2.5 m3 per second, as well as plant offering third stage treatment for same 2.5 m3 per second flow rate. Total cost est. at $22 million; $14 million for plant and $8 million for collection system. Interested firms contact Ing. Mario Rojas, Div. de Drenajes, 5o. Piso Ala Poniente, Municipalidad de Guatemala, Tel: 20121-8, Ext. 82, for more information, sending a copy of their letter (which preferably should be in Spanish) to American Embassy, 8a. Avenida 11-65, APO New York 09891.

ARGENTINA—Direccion Nacional de Construcciones Porturias y Vias Navegables (DNCPVN) has **purchasing program** for 1976 and foreign firms wishing to participate must bid in conjunction with a local shipyard. List of equipment and local shipyards is available from Dept. of Commerce, Trade Opportunities Program, TOP, Rm 2321, Washington, D.C. 20230.

GERMANY—Munich Fair Authority has announced plans to construct **new conference quarters.** It has accepted architectural plans, and has requested bids from local construction firms. Plans call for construction of large auditorium seating 2,000; two smaller auditoriums seating 500 each; two larger conference rooms with seating capacity of 400; and seven smaller conference rooms seating between 100 and 150 each. Opportunities exist for U.S. firms able to supply sound amplification equipment, air-conditioning and heating equipment, TV equipment, and furniture. Interested firms contact: Muenchener Messe- und Ausstellungsgesellschaft mbH, D-8000 Muenchen 12, Theresienhoehe 13, Germany, Telex: 5212086.

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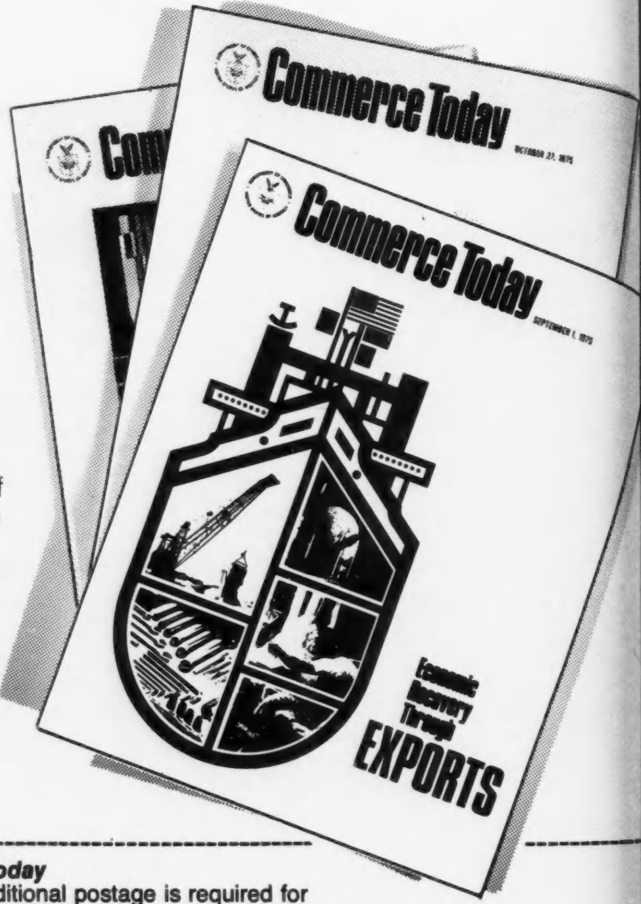

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